51PW9303

Your Television's Directions for Use

51" Digital Widescreen HDTV Monitor

- *Active Control™*
- *APAC™—Automatic Phosphor Aging Compensation*
- *Eye Fidelity*
- *Picture-in-Picture*
- *HD DVI and component inputs*
- *Virtual Dolby® Surround—20-watt RMS*
- *Protective screen*
- *Multipoint digital convergence*

Let's make things better.

PHILIPS

3135 035 21361

Return your Warranty Registration card today to ensure you receive all the benefits you're entitled to.

Once your PHILIPS purchase is registered, you're eligible to receive all the privileges of owning a PHILIPS product. So complete and return the Warranty Registration Card enclosed with your purchase at once. And take advantage of these important benefits.

Warranty Verification

Registering your product within 10 days confirms your right to maximum protection under the terms and conditions of your PHILIPS warranty.

Owner Confirmation

Your completed Warranty Registration Card serves as verification of ownership in the event of product theft or loss.

Model Registration

Returning your Warranty Registration Card right away guarantees you'll receive all the information and special offers which you qualify for as the owner of your model.

Congratulations on your **purchase,** and welcome to the **"family!"**

PHILIPS

Dear PHILIPS product owner:

Thank you for your confidence in PHILIPS. You've selected one of the best-built, best-backed products available today. And we'll do everything in our power to keep you happy with your purchase for many years to come.

As a member of the PHILIPS "family," you're entitled to protection by one of the most comprehensive warranties and outstanding service networks in the industry.

What's more, your purchase guarantees you'll receive all the information and special offers for which you qualify, plus easy access to accessories from our convenient home shopping network.

And most importantly, you can count on our uncompromising commitment to your total satisfaction.

All of this is our way of saying welcome–and thanks for investing in a PHILIPS product.

Sincerely,

Lawrence J. Blanford

Lawrence J. Blanford
President and Chief Executive Officer

P.S. Remember, to get the most from your PHILIPS product, you must return your Warranty Registration Card within 10 days. So please mail it to us right now!

Know these **safety***symbols*

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This "bolt of lightning" indicates uninsulated material within your unit may cause an electrical shock. For the safety of everyone in your household, please do not remove product covering.

The "exclamation point" calls attention to features for which you should read the enclosed literature closely to prevent operating and maintenance problems.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

CAUTION: To prevent electric shock, match wide blade of plug to wide slot, and fully insert.

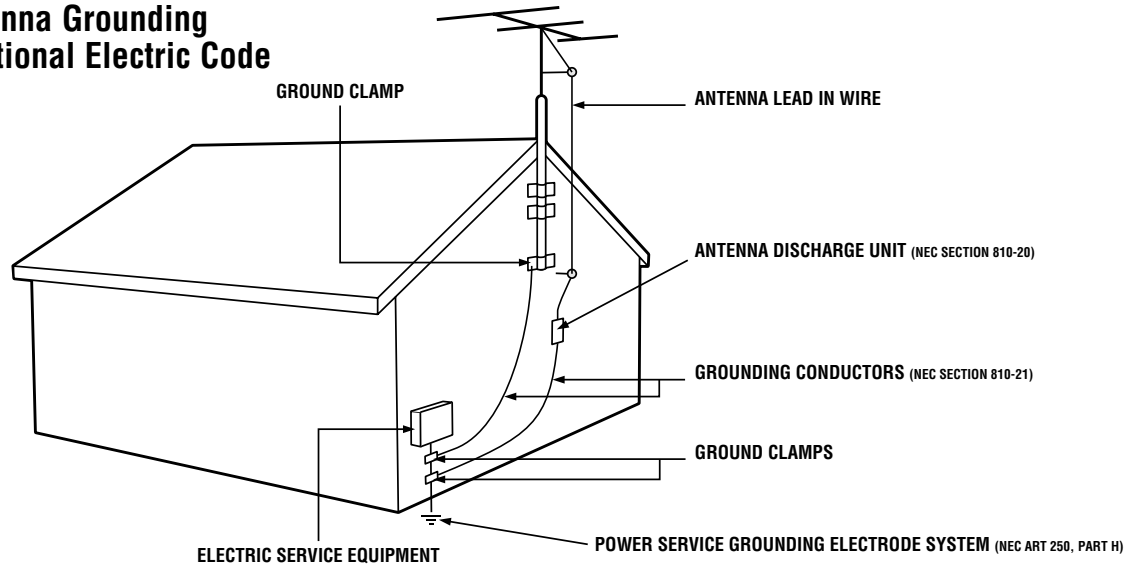
ATTENTION: Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

IMPORTANT SAFETY INSTRUCTIONS
Read before operating equipment

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any of the ventilation openings. Install in accordance with the manufacturers instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and third grounding prong. The wide blade or third prong provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. This product may contain lead and mercury. Disposal of these materials may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or the Electronic Industries Alliance: www.eiae.org
16. **Damage Requiring Service** - The appliance should be serviced by qualified service personnel when:
    - **A.** The power supply cord or the plug has been damaged; or
    - **B.** Objects have fallen, or liquid has been spilled into the appliance; or
    - **C.** The appliance has been exposed to rain; or
    - **D.** The appliance does not appear to operate normally or exhibits a marked change in performance; or
    - **E.** The appliance has been dropped, or the enclosure damaged.
17. **Tilt/Stability** - All televisions must comply with recommended international global safety standards for tilt and stability properties of its cabinet design.
    • Do not compromise these design standards by applying excessive pull force to the front, or top, of the cabinet which could ultimately overturn the product.
    • Also, do not endanger yourself, or children, by placing electronic equipment/toys on the top of the cabinet. Such items could unsuspectingly fall from the top of the set and cause product damage and/or personal injury.
18. **Wall or Ceiling Mounting** - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
19. **Power Lines** - An outdoor antenna should be located away from power lines.
20. **Outdoor Antenna Grounding** - If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges.
    Section 810 of the National Electric Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding connectors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure below.
21. **Object and Liquid Entry** - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

Note to the CATV system installer: This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Example of Antenna Grounding as per NEC - National Electric Code


GROUND CLAMP
ANTENNA LEAD IN WIRE
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
GROUNDING CONDUCTORS (NEC SECTION 810-21)
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250, PART H)
ELECTRIC SERVICE EQUIPMENT

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QUICK USE AND SETUP GUIDE

Refer to the simple *Quick Use and Setup Guide* (supplied with your TV) for details on the following:

- Basic TV connections
- Television and remote control operation
- On-screen menu controls
- Installation features.

Items Included with This TV

As you unpack your TV, please note that this *Directions for Use* manual contains safety-tip information and Factory Service Center locations, as well as a Warranty Registration Card, remote control, and batteries for use with the remote control.

Please take a few minutes to complete your registration card. The serial number for the TV is on the rear of the set.

Refer to page 60 for instructions in the cleaning and care of the TV.

FEATURES

Active Control™ continuously measures and corrects all incoming signals to provide the best picture settings. This feature provides a sharp and virtually noise-free picture any time, from any NTSC source. NTSC is the National Television Standards Committee format devised in the 1940s for TV broadcast analog video signals (525 lines: 30Hz).

Alternate Channel (A/CH) button allows you to switch back and forth between the currently viewed channel and the previously viewed channel.

Audio/video jacks allow direct connections with VCRs and other accessories for quality TV picture and sound playback. Component video input jacks are provided for high-fidelity color and picture resolution when using digital video source material, such as a DVD.

Audio Volume Leveler (AVL) control keeps the TV's sound at an even level. Peaks and valleys that occur during program changes or commercial breaks are reduced, making for a more consistent, comfortable sound.

AutoChron™ automatically sets the right time of day and maintains it with digital precision through brownouts, power failures, and even Daylight Savings Time adjustments.

AutoLock™ protects young children from objectionable programming with V-chip technology.

Automatic Format automatically detects the incoming signal's format and adjusts it to fill the screen. Also, your remote control has a Format button that allows you to select the picture format you want to see.

Automatic Phosphor Aging Compensation (APAC™) — Stationary images, particularly black bars that outline 4:3 programming on a widescreen TV, could eventually leave an after-image on the screen. APAC automatically shifts the image just enough to blur after-image retention, reducing the effects of stationary images.

AutoPicture™ allows you to push a button and adapt your TV's picture to various types of programs, such as sports, movies, and multimedia (games).

AutoSound™ allows you to select from three factory-set controls and a personal control that you set according to your own preferences through the on-screen Sound submenu. The three factory-set controls—Voice, Music, and Theatre—enable you to tailor the TV sound to enhance the particular programming you are watching.

AutoSurf™ allows you to easily switch among only the channels that are of interest to you. You can program up to 10 channels into the TV's AutoSurf™ memory through the on-screen display.

Channel Edit allows you to add or remove channels from the list of channels stored in the TV's memory. Channel Edit makes it easy to limit or expand the number of channels that are available to you when you press the CH +/– buttons on your remote control.

Closed Captioning allows you to read TV program dialog or voice conversations as on-screen text.

Virtual Dolby* Surround (referred to as "Dolby Virtual" in the on-screen submenu) uses two speakers to simulate the surround effect produced by a multichannel system.

Dynamic Contrast helps you sharpen the picture quality by making the contrast between the dark and bright picture areas more noticeable as the image on the screen changes.

Eye Fidelity (selectable progressive or interlaced scan) offers a choice between two different scanning techniques—progressive and double lines interlaced. Progressive de-interlaces the lines of both fields of a video frame and displays them all at once. This minimizes line flicker and the visibility of the scan lines. The interlaced mode provides a doubled-line interlaced display of progressive. This helps smooth out jagged lines seen on curved and angled edges.

HD DVI and Component Inputs—DVI supports High-definition Copy Protected digital video input for connection to compliant set-top boxes. The component connection (Y Pb Pr or RGB +HV) offers color purity, crisp color detail, and reduced color noise.

Hi-fi stereo system, includes a built-in audio amplifier and a twin speaker system. The system enables you to hear stereo sound or Second Audio Program (SAP) bilingual broadcasts when they are available.

Home-cinema universal remote control operates your TV set and other devices that work by infrared remote control, such as VCRs, cable converter boxes, satellite receivers, and others. **Note:** You may need to program the remote to work with devices other than the TV. See pages 18–23.

Incredible Surround™ enhances stereo programs by making the sound broader and fuller.

On-screen menu shows the TV controls and allows you to adjust or set those controls (can be viewed in American English, French, or Spanish).

Picture-in-picture (PIP) allows you to monitor one video source while watching another. You can swap the main and secondary pictures, or position the PIP window in any screen corner.

Program List displays a list of your favorite channels at the press of a button. You can scroll through the list, highlight a favorite channel, and tune to the channel.

Protective screen filter helps prevent accidental damage to the delicate front lenticular screen. Anyone with children or pets knows accidents can happen in the home—especially when parents aren't watching. The protective screen filter is specifically formulated by Philips for HD displays to protect your investment while giving the best possible picture.

Sleep Timer automatically turns the TV off after a set amount of time of your choice.

Standard broadcast (VHF/UHF) or cable TV (CATV) channel capability, as well as advanced capability for high-definition video.

Three-line comb filter provides improved chroma/luminance separation to the picture. Offering vertical-edge enhancement and virtually no "dot crawl," this filter easily supports the demands of DVD players and other advanced high-resolution video sources.

As an Energy Star® Partner, Philips Consumer Electronics has determined this product meets the Energy Star® guidelines for energy efficiency. Energy Star® is a U.S. registered mark. Using products with the Energy Star® label can save energy. Saving energy reduces air pollution and lowers utility bills.

Active Control, APAC, AutoChron, AutoPicture, AutoSound, AutoSurf, and Incredible Surround are trademarks of Philips Consumer Electronics North America. Copyright © 2003 Philips Consumer Electronics.
*Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

End-of-life Disposal

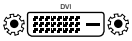
Your new projection television and its packaging contain materials that can be recycled and reused. Specialized companies can recycle your product to increase the amount of reusable materials and minimize the amounts that need to be properly disposed. The batteries used by your product should not be thrown away when depleted but should be handed in and disposed of as small chemical waste. Please find out about the local regulations concerning how to dispose of your old television, batteries, and packaging materials whenever it is time to replace them.

JACKS, CABLES, AND CONNECTORS

This page contains descriptions and illustrations of jacks, cables, and connectors you might use in making connections. The cables and connectors are not supplied with your TV, but you can purchase them at stores that sell electronics. Or you can order them by calling our Customer Care Center at 1-800-531-0039.

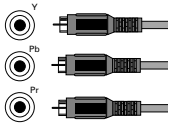
DVI Jack
Cable used: DVI

Supports High-definition Copy Protected digital video input for connection to compliant set-top boxes.



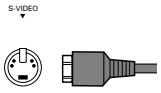
Component Video Input Jacks
Cables used: component video with RCA-type phono plugs

Allow you to connect accessory devices such as DVD players. Separating the video into three signals, these inputs provide excellent quality. Be sure to connect the left and right audio cables, because the Y, Pb, Pr jacks receive only the picture signal.



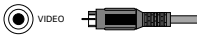
S-Video Jacks
Cable used: S-Video

Provide a higher quality picture than the Video (composite) jacks because the color part of the picture is separated from the black and white portion. Be sure to connect the left and right audio cables, because the S-Video jacks receive only the picture signal.



Video (called *composite*) Jacks
Cable used: Video with RCA-type phono plug

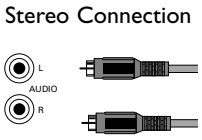
Provide better picture performance than the antenna RF input. Be sure to connect the audio cables, because the video jacks receive only the picture signal.



Your TV also has an OUTPUT VIDEO jack. Use a video cable with RCA-type phone plugs to make connections.

Audio Jacks
Cables used: Audio with RCA-type phono plug

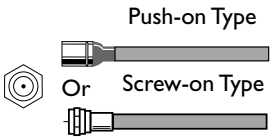
Provide sound for the video inputs. If your accessory device has only one output for audio, connect it to the left (color coded white) audio jack on the TV.



Your TV also has OUTPUT AUDIO jacks. Use audio cables with RCA-type phone plugs to make connections.

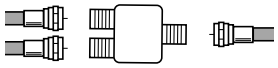
Antenna RF Jack
Cables used: RF coaxial cable (75Ω)

Allows you to connect an antenna, cable TV, or components having only RF outputs to the antenna input on the TV. RF coaxial cables are available in push-on or screw-on type.



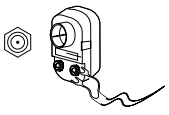
Signal Splitter

Allows you to route an antenna or cable TV signal to two inputs.



300- to 75-ohm Twin-lead Adapter

Accepts twin-lead wires from an antenna and allows connection to the antenna input on the TV. If your antenna is already equipped with an RF coaxial cable, you will not need this adapter.



Panel Overviews: Standard Inputs and Outputs

You can connect a wide range of video and audio devices to your TV, in various ways. This page and the next one provide an overview of signal compatibilities and the types of devices you can connect to the jacks. Connection examples follow on subsequent pages. See pages 1 and 2 of the Quick Use and Setup Guide that came with your set for examples of basic connections. Also see page 6 of that publication for a Picture-in-Picture (PIP) connection example. You may also want to refer to the user instructions that came with each particular device for information on connections.

What You Can Connect to the Standard Panel Jacks

1 **ANTENNA IN 75Ω jack—**use to connect radio-frequency (RF) signals from VHF/UHF antennas or a cable system. These are 480i signals.

2 **YPbPr (component video input [CVI] jacks)—**compatible with 480i signals only. Use to connect accessories having component video outputs, such as DVD players, laser-disc players, video-game players, satellite receivers, or other devices. Use the INPUT-AV 1 L(eft) and R(ight) AUDIO jacks for sound connections. CVI is not accessible in the PIP window.

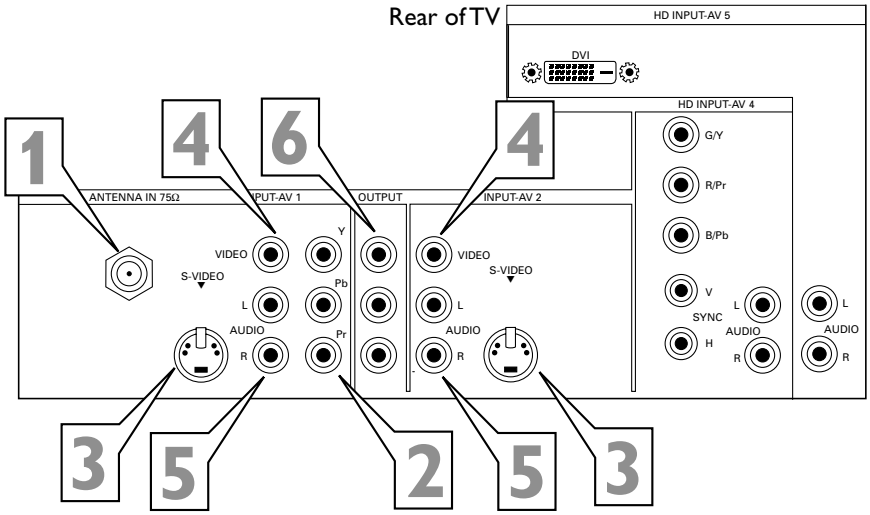
3 **S-VIDEO (super video) jacks—**compatible with 480i signals only. Use to connect accessories having Super VHS (S-VHS) outputs, such as VCRs, DVD players, laser-disc players, video-game players, satellite receivers, or other devices.

4 **VIDEO (composite) jacks (INPUT-AV 1, INPUT-AV 2, and TV's side jack panel [AV3])—**compatible with 480i signals only. Use to connect accessories having composite video outputs, such as VCRs, video-game players, or other devices.

5 **AUDIO inputs (INPUT-AV 1, INPUT-AV 2, and TV's side jack panel [AV3])—**use to connect from the audio output jacks on VCRs, DVDs, or other accessories.

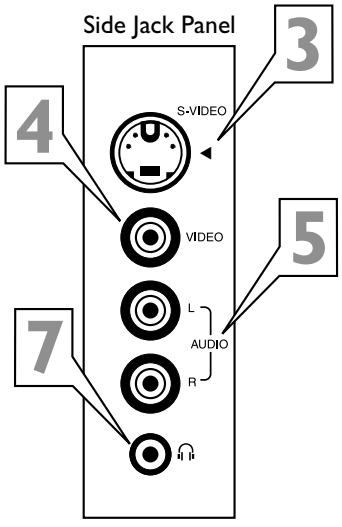
6 **OUTPUT (VIDEO/AUDIO)—**video is compatible with 480i signals only. Use to connect to a VCR to record programs from the TV. Or use the AUDIO outputs to connect to an audio hi-fi system.

7 **Headphone jack—**use to connect headphones for personal listening.



Summary of signal compatibilities

Input jacks on TV	Compatible output signal from an external source or device
ANTENNA IN 75Ω, INPUT AV-1, INPUT AV-2, and side jack panel (AV3)	480i (480 lines, interlaced)



NOTE: The TV recognizes the side jack panel as AV3.

Helpful Hints

- Signals connected to the HD INPUT-AV 4 or HD INPUT-AV 5 inputs will provide you with the best picture. Examples of sources for such signals are a progressive-scan DVD player (480p) or an HD receiver (1080i or 480p) with YPbPr or RGB outputs. The 1080i signals will provide you with the best picture possible. Devices with RGB outputs may or may not have H and V sync outputs to connect to the HD INPUT-AV 4 H and V SYNC inputs (see page 57). Instructions for selecting the AV4 color space (YPbPr or RGB) are on page 59.
- Among the 480i-compatible inputs (ANTENNA IN 75Ω, INPUT AV-1, INPUT AV-2, and the side jack panel), you will get the best picture from the component video inputs (labeled YPbPr). The S-Video inputs will provide the next-best level of picture quality.

☑ *Check It Out*

The side jack-panel inputs (recognized by the TV as AV3) are convenient for connecting a camcorder. See page 16.

Panel Overviews: High-definition Inputs

The HD INPUT-AV 4 and HD INPUT-AV 5 jacks allow you to connect digital equipment with 1080i or 480p signal output.

What You Can Connect to the High-definition Input Jacks

1 **HD INPUT-AV 4—**use to connect digital equipment with a 1080i or a 480p signal output, such as HD receivers (1080i or 480p) or DVD players with progressive-scan capability (480p). You can connect equipment with YPbPr component video or RGB outputs to the HD INPUT-AV 4 jacks. H and V Sync connections may or may not be required for RGB connections. (See page 57.) Dedicated audio input jacks are located with the HD INPUT-AV 4 video jacks.

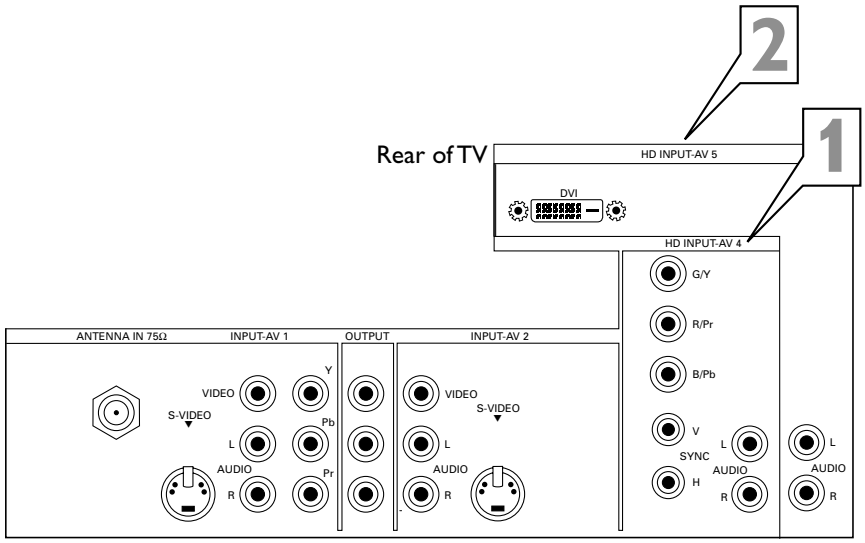
NOTE: The Picture-in-Picture (PIP) feature is not available for use with AV 4.

2 **HD INPUT-AV 5—**accepts a digital video interface (DVI) plug, which uses digital data in the format data standard called Transition Minimized Differential Signaling (TMDS). Use HD INPUT-AV 5 to connect digital equipment with DVI (digital video interface) 1080i or 480p output. DVI is a specific digital input allowing encrypted transmission of uncompressed HD content. DVI includes HDCP (high-bandwidth digital content protection), which is supported by the motion picture industry, satellite providers, and most of the consumer electronics industry. DVI is gaining momentum and quickly becoming an industry standard for the consumer to view high-definition material while keeping content protected. For sound, use the dedicated audio input jacks located with the HD INPUT-AV 5 DVI jack.

NOTE: The Picture-in-Picture (PIP) feature is not available for use with AV5.

Helpful Hint

Because DVI is such new technology, the electronics industry is still working toward a decision on one standard. Philips testing has determined that compatibility issues exist with respect to a limited number of high-definition receivers when they are connected to the DVI input on this television. If you should experience difficulties, please contact our Customer Care Center at 1-800-531-0039.



Summary of signal compatibilities

TV Input	Compatible output signal from an external source or device
HD INPUT-AV 4	1080i (1080 lines, interlaced) or 480p (480 lines, progressive scan)
HD INPUT-AV 5	Digital video interface (DVI) with 1080i (1080 lines, interlaced) or 480p (480 lines, progressive scan)

Helpful Hints

- The TV's default color-space setting for HD INPUT-AV 4 is YPbPr. If the picture looks grossly incorrect, try changing the color-space setting on either the digital equipment or the TV. For more information on setting the color space on the digital equipment, see the equipment's directions-for-use manual. To set the TV's color space, see page 59 in this manual.
- This television is designed to be compatible with high-definition signal standards 1080i and 480p as specified by the Electronic Industries Association standard EIA770.3. Because output standards may vary by manufacturer, you may encounter some digital equipment that will not properly display pictures on the TV.
- The PIP (Picture-in-picture) feature allows you to tune to a program in the main window and scan other channels in the PIP window. From a single antenna or cable input, signals are separated into two signals within the television. The AV1, AV2, and AV3 inputs are also available as PIP sources.

CONNECTING A VCR

The TV's audio/video (AV) input jacks provide for direct picture and sound connections between the TV and accessory devices such as VCRs, DVD players, and others that have AV output jacks.

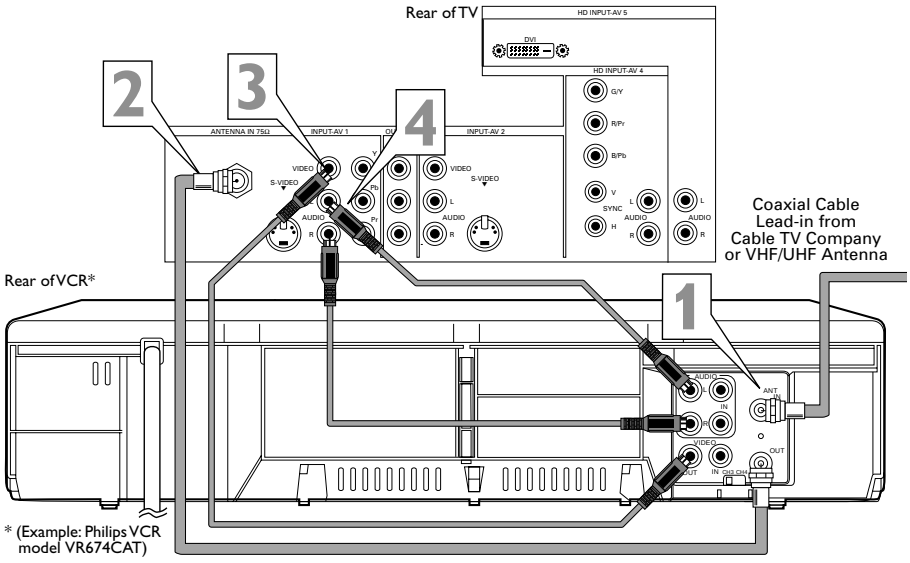
This example, which uses the INPUT-AV 1 jacks, shows you one way you can connect a VCR to your TV.

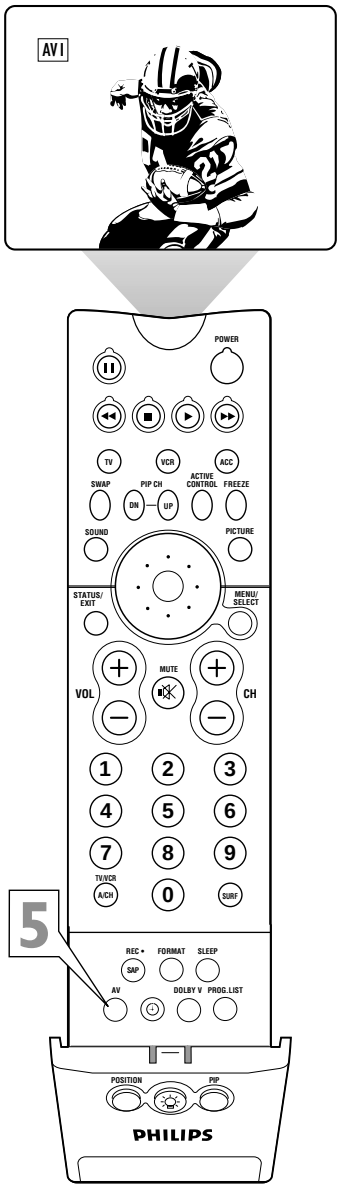
Refer to the directions-for-use manual for your VCR for further information on connections.

To make the connections shown in this example, you will need:

- *one coaxial cable (75Ω)*
- *one cable for a video connection (standard RCA-type phono plug)*
- *two cables for audio connections (standard RCA-type phono plugs) (only one cable is needed for a nonstereo VCR).*

***NOTE:** The cables are not supplied with your TV. You should be able to buy them at most stores that sell electronics. Or you can call our Customer Care Center at 1-800-531-0039*





1 **Connect a cable TV or antenna signal** to the ANT IN jack on the back of the VCR.

2 **Connect from the OUT jack on the back of the VCR** to the ANTENNA IN 75Ω jack on the back of the TV.

3 **Connect the VIDEO OUT jack on the back of the VCR** to the INPUT-AV 2 VIDEO jack on the back of the TV.

4 **Connect the audio output R(ight) and L(eft) jacks on the back of the VCR** to the INPUT-AV 2 AUDIO jacks on the back of the TV.

NOTE: If the VCR is a mono (nonstereo) unit, connect only the left audio cable, which usually has a white-coded plug.

5 **Press the AV button on the remote control** as many times as necessary to select the AV2 source for viewing of materials from the VCR.

HELPFUL HINTS

- Stereo sound will pass from the ANT OUT jack on the VCR to the ANTENNA IN 75Ω jack on the TV only when the VCR is in TV mode. This is the mode that allows the TV to use its channel selector.
- To simplify making connections, audio and video cables often have color-coded plugs. The jacks on your TV are likewise color coded to match the plugs. The coding is as follows:
  —Yellow for video (composite)
  —Red for the right audio channel
  —White for the left audio channel

  NOTE: If your VCR is mono (nonstereo), you will connect only one audio cable. You must ensure that the TV is set to MONO for the signal source to which you've connected the VCR (INPUT-AV 2, INPUT-AV 1, or the side panel inputs [AV3]). Otherwise, you will receive sound from only one of the TV's speakers. See page 36.

☑ CHECK IT OUT

You can display the AV1, AV2, or AV3 signal sources in the PIP window. See page 7 of the *Quick Use and Setup Guide* for information on using the Picture-in-Picture (PIP) feature.

CONNECTING A VCR AND CABLE BOX

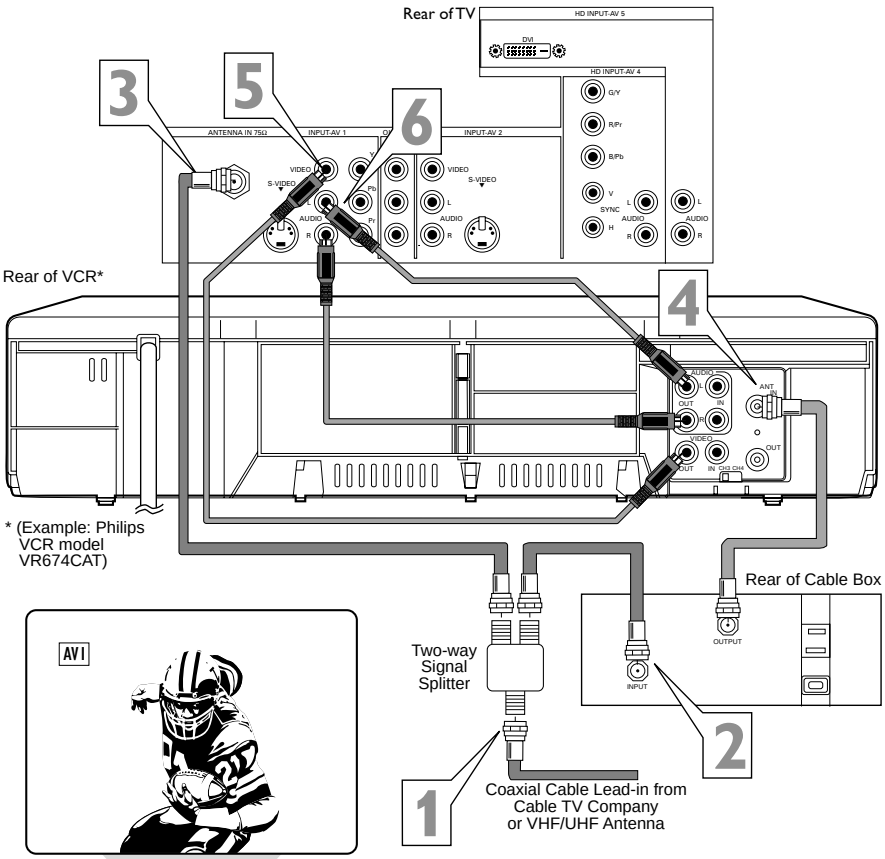
Presented here is a connection example involving a VCR and cable box.

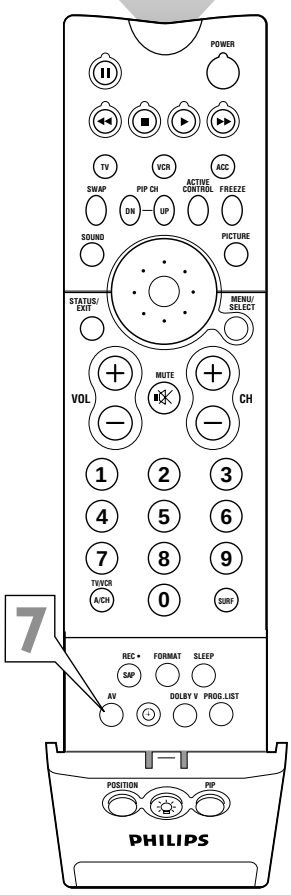
Refer to the VCR's directions-for-use manual for further information on connections.

To make the connections in this example, you will need:

- *one, two-way signal splitter*
- *two coaxial cables (75Ω)*
- *one cable for a video connection (standard RCA-type phono plug)*
- *two cables for audio connections (standard RCA-type phono plugs) (only one cable is needed for connection to a nonstereo VCR).*

***NOTE:** The cables are not supplied with your TV. You should be able to buy them at most stores that sell electronics. Or you can call our Customer Care Center at 1-800-531-0039.*





1 **Connect a cable TV signal** to a two-way signal splitter.

2 **Connect one of the two-way signal splitter outputs** to the CABLE IN jack on the cable box.

3 **Connect the other two-way signal splitter output** to the ANTENNA IN 75Ωjack on the back of the TV**.**

4 **Connect from the cable box TO TV jack** to the ANT IN jack on the back of the VCR.

5 **Connect the VIDEO OUT jack on the VCR** to the INPUT-AV 2 VIDEO jack on the back of the TV**.**

6 **Connect the AUDIO OUT R(ight) and L(eft) jacks on the VCR** to INPUT-AV 2 AUDIO jacks on the back of the TV.

NOTE: If the VCR is a nonstereo unit, connect only the left audio cable, which usually has a white-coded plug.

7 **Press the AV button on the remote control** as many times as necessary to select the AV2 source for viewing of materials from the cable box or VCR.

HELPFUL HINTS

- The RF output on a cable box, usually labeled "OUTPUT," "OUT," or "TO TV," will not pass a stereo sound signal to the ANTENNA IN 75Ω jack on the TV. If, however, your cable box has separate Audio/Video outputs, using A/V cables to connect to those outputs and to the A/V inputs on the TV might pass a stereo sound signal to the TV. Contact your cable TV company for more information.
- To simplify making connections, the plugs on audio and video cables are often color coded. The jacks on your TV are likewise color coded to match the plugs. The coding is as follows:
  —Yellow for video (composite)
  —Red for the right audio channel
  —White for the left audio channel

  NOTE: If your VCR is mono (nonstereo), you will connect only one audio cable. You must ensure that the TV is set to MONO for the signal source to which you've connected the VCR (INPUT-AV 2, INPUT-AV 1, or the side panel inputs [AV3]). Otherwise, you will receive sound from only one of the TV's speakers. See page 36.

CONNECTING AND USING AN AUDIO HI-FI SYSTEM WITH YOUR TV

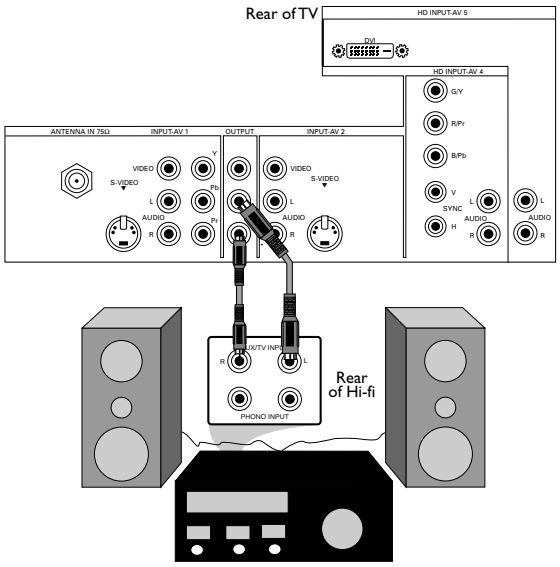
You can use your TV's AUDIO OUTPUT jacks to connect to an external audio hi-fi system. Follow the simple steps below.

To make these connections, you will need two cables for audio connections (standard RCA).

***NOTE:** The cables are not supplied with your TV. You should be able to buy them at most stores that sell electronics. Or you can call our Customer Care Center at 1-800-531-0039.*

Connect the L(eft) and R(ight) AUDIO OUTPUT jacks on the rear of the TV to the L(eft) and R(ight) AUX/TV INPUT jacks on the rear of the hi-fi system.

See the section below on using the AUDIO OUT control.



After connecting the TV's AUDIO OUTPUT jacks to the AUDIO INPUT jacks on an external hi-fi system, set the AUDIO OUT control in the SOUND submenu to either VARIABLE or FIXED to determine whether you adjust the volume at the TV or at the external hi-fi system. To change the volume at the TV using the TV's remote control, you must select VARIABLE. To adjust the volume at the stereo using the hi-fi's controls, you must select FIXED. You can also use the SPEAKERS control in the SOUND submenu to turn the TV's speakers off.

1 **Press the MENU/SELECT button** on the remote control to show the on-screen menu.

2 **Press the CURSOR RING DOWN** once to highlight SOUND.

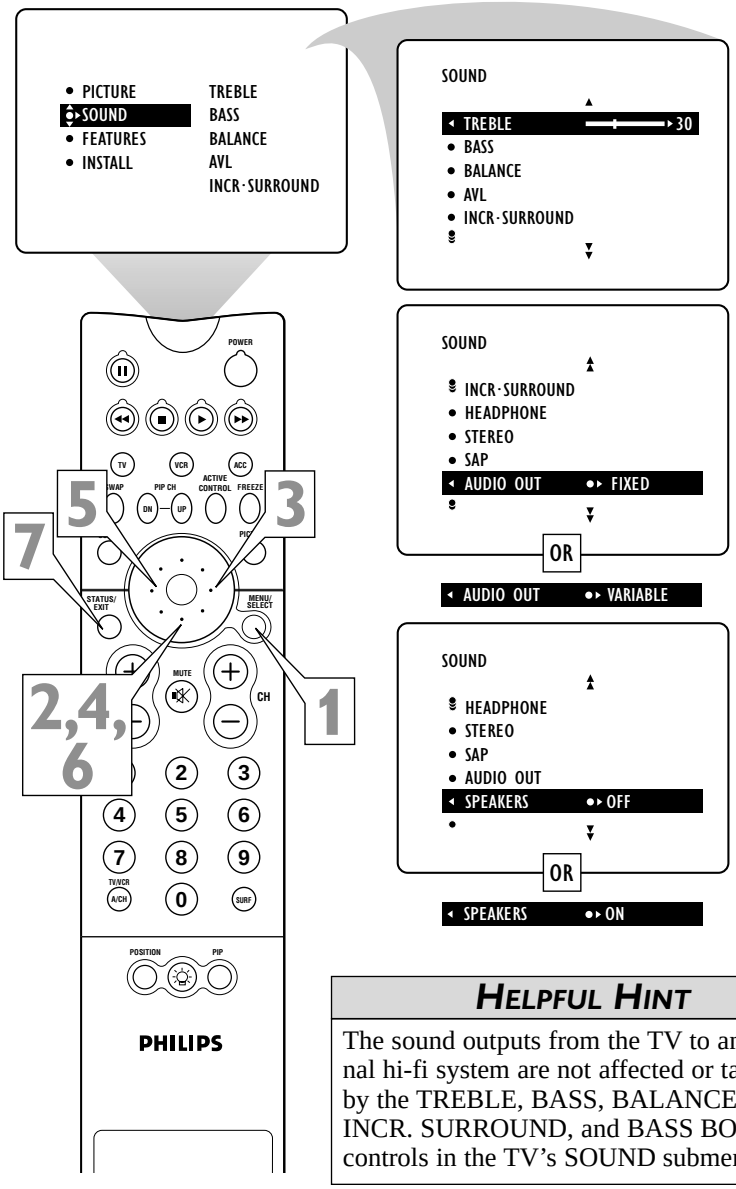
3 **Press the CURSOR RING RIGHT** to enter the SOUND submenu.

4 **Press the CURSOR RING DOWN** repeatedly until AUDIO OUT is highlighted.

5 **Press the CURSOR RING LEFT or RIGHT** to set the AUDIO OUT to either VARIABLE or FIXED.

6 **If you want to turn the TV's internal speakers off, press the CURSOR RING DOWN** repeatedly until SPEAKERS is highlighted. Then press the CURSOR RING LEFT or RIGHT to turn the speakers off.

7 **Press the STATUS/EXIT button** to exit the menu.



HELPFUL HINT

The sound outputs from the TV to an external hi-fi system are not affected or tailored by the TREBLE, BASS, BALANCE, AVL, INCR. SURROUND, and BASS BOOST controls in the TV's SOUND submenu.

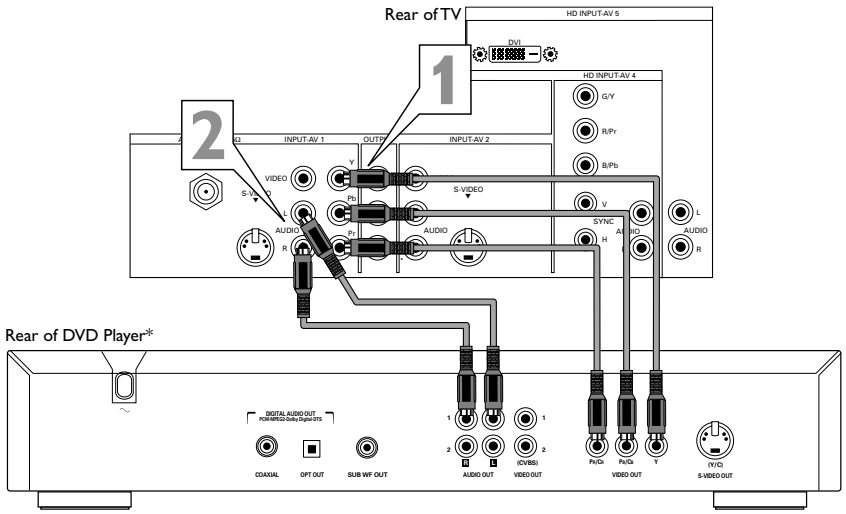
CONNECTING A STANDARD DVD PLAYER

Component video inputs allow the highest possible color and picture resolution in the playback of digital signals, such as those of DVD players. The color difference signals (Pb, Pr) and the luminance (Y) signal are connected and received separately. The result is better color bandwidth information than is possible with composite video (labeled VIDEO on your TV's jack panel) or S-Video connections.

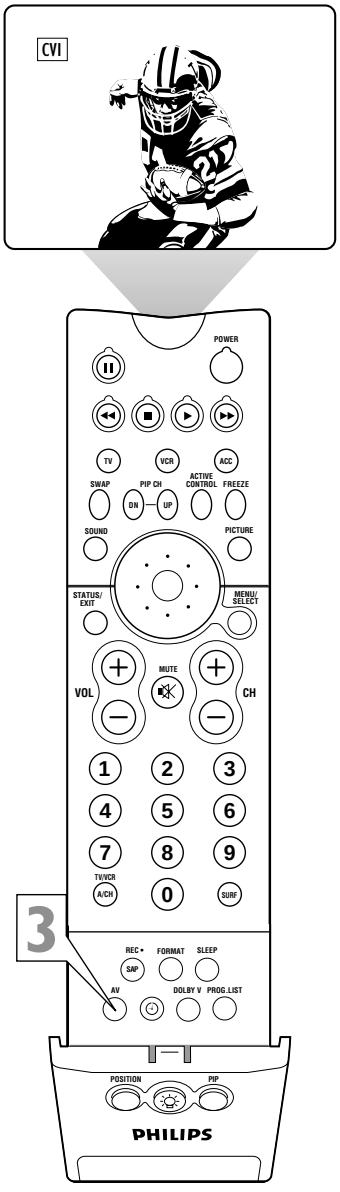
To make the connections shown in this example, you will need:

- *three cables for video connections (standard RCA connectors)*
- *two cables for audio connections (standard RCA connectors).*

***NOTE:** The cables are not supplied with your TV. You should be able to buy them at most stores that sell electronics. Or you can call our Customer Care Center at 1-800-531-0039.*



*(Example: Philips DVD model DVD712)



1 **Connect the YPbPr (component) VIDEO OUT jacks on the DVD player** to the INPUT-AV 1 YPbPr (component video) jacks on the rear of the TV. **NOTE: The INPUT-AV 1 YPbPr jacks will accept 480i (interlaced) output signals only.** The connection example on this page assumes the use of a DVD player with interlaced output. Some DVD players, however, have YPbPr outputs that can be switched between interlaced and progressive scan. If you are attempting to use a DVD player with progressive-scan (480p output) capability to make the connection shown in this example, you must be sure to switch the DVD player to interlaced. If necessary, refer to the DVD player's directions-for-use manual for help. If you want to use the DVD player in progressive-scan mode, you must use the HD INPUT-AV 4 jacks.

2 **Connect the AUDIO OUT L(eft) and R(ight) jacks on the DVD player** to the INPUT-AV 1 AUDIO jacks on the rear of the TV.

3 **Press the AV button on the remote control** as many times as necessary to select the CVI (component video input) source for the viewing of materials from your DVD player.

HELPFUL HINTS

- To simplify making connections, the connectors on audio and video cables are often color coded. The jacks on your TV are likewise color coded to match the connectors.
- The names for the component video jacks may differ depending on the DVD player or accessory digital source equipment used. For example, besides YPbPr, you may see R-Y/B-Y/Y; or CrCbY. Although abbreviations and terms may vary, the letters *B* and *R* stand for the blue and red color component signal connectors, respectively, and *Y* indicates the luminance signal. If necessary, refer to the directions-for-use manual for your DVD or digital accessory for more information.
- You can also connect a satellite receiver to the TV in a manner similar to the example shown on this page. If you connect a satellite receiver to the TV, you will need to use the receiver's channel-memorization system to store channels in the receiver's memory.
- If you experience difficulties receiving sound with a DVD disc, check the sound settings through the DVD disc's menu.
- CVI is not accessible in the PIP window. See pages 6 and 7 in the *Quick Use and Setup Guide* for more on the PIP feature.

WARNING

To prevent uneven picture tube aging, do not leave nonmoving images or border bars on the screen for an extended period. See page 60.

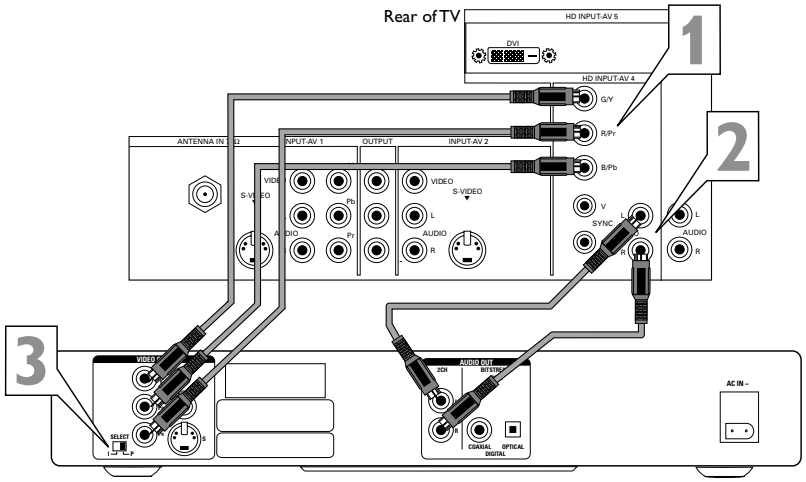
Connecting a DVD Player with Progressive-scan Capability

The following instructions explain how to connect a DVD player with progressive-scan capability to the HD INPUT-AV 4 jacks on your TV.

To make the connections, you will need:

- *three cables for video connections (standard RCA connectors)*
- *two cables for audio connections (standard RCA connectors).*

***NOTE:** The cables are not supplied with your TV. You should be able to buy them at most stores that sell electronics. Or you can call our Customer Care Center at 1-800-531-0039.*



Rear of DVD Player with Progressive-scan Capability

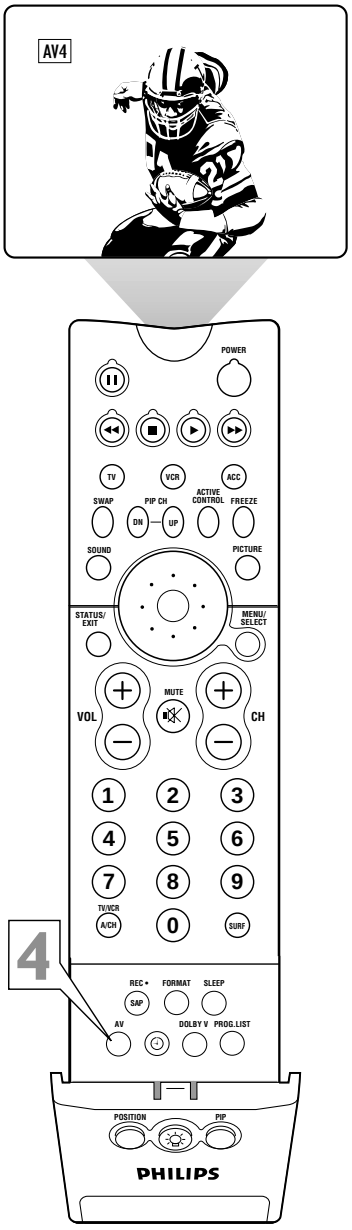
1 **Connect from the YPrPb jacks** on the rear of the DVD player to the HD INPUT-AV 4 G/Y, R/Pr, B/Pb jacks on the rear of the TV.

2 **Connect from the L(eft) and R(ight) AUDIO OUT jacks** on the rear of the DVD player to the HD INPUT-AV 4 AUDIO L(eft) and R(ight) jacks on the rear of the TV.

3 **Make sure the DVD player is in progressive-scan mode. You will not get a viewable picture through the HD INPUT-AV 4 jacks if the DVD player is in interlaced mode.**

For more information on placing your DVD player in progressive-scan mode, see the DVD player's directions-for-use manual. Also, see the Helpful Hints to the right. The way in which progressive-scan mode is selected varies among DVD players.

4 **Press the AV button on your TV remote control** as many times as necessary to select the AV4 signal source for the viewing of materials from your progressive-scan DVD player.



Helpful Hint

If you experience difficulties receiving sound with a DVD disc, check the sound settings through the DVD disc's menu.

Warning

To prevent uneven picture tube aging, do not leave nonmoving images or border bars on the screen for an extended period. See page 60.

Helpful Hints

- If after connecting your DVD player your display is filled with wavy lines, it may be that your DVD player is not set to progressive-scan mode. Some DVD players have an I/P (interlaced/progressive scan) switch located on the back or front of the players for changing from interlaced to progressive-scan mode. Other DVD players may allow the mode to be changed by pressing a button on the DVD player's remote control or by using the DVD player's on-screen menu. **If the interlaced/progressive-scan selection option is provided only through the DVD on-screen menu, you will need to connect the DVD player to another AV input source in addition to HD INPUT-AV 4 to see the DVD menu. Select this additional AV source on screen to see the DVD menu and choose progressive-scan mode. You will then be able to see the DVD picture through the AV4 source.**
- Some DVD players have dedicated progressive-scan output jacks that are labeled as such and require no switching to provide a picture through the HD INPUT-AV 4 jacks. See your DVD player's directions-for-use manual for information.
- The default color-space setting for the HD INPUT-AV 4 jacks is YPbPr. RGB is also an option. If the picture's color looks grossly incorrect, try changing either the DVD player's or TV's color-space setting. See the DVD player's directions-for-use manual for information on setting its color space. Or see page 59 in this manual to set the TV's color space.
- The Picture-in-Picture (PIP) feature does not function with AV4 or AV5.

CONNECTING AN S-VIDEO DEVICE

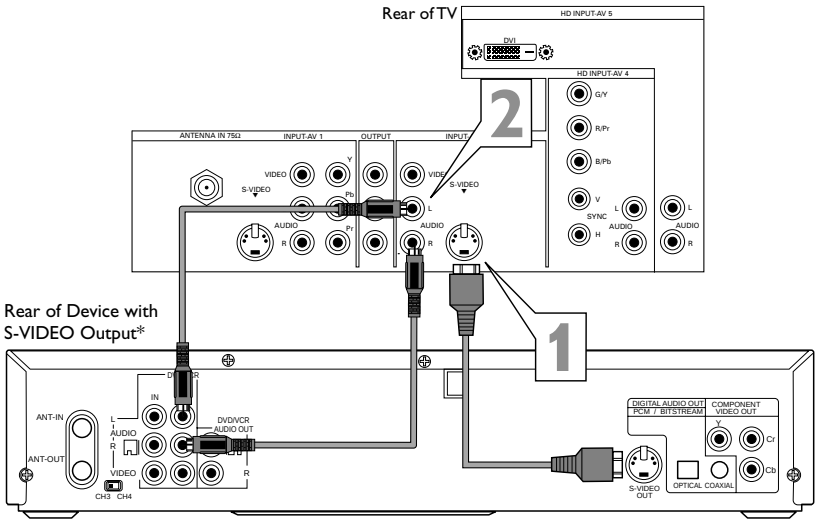
The S(uper)-Video connection on the rear (and side panel) of the TV can give you better picture detail and clarity for the playback of S-VHS VCR tapes or DVDs than the normal antenna (RF signal) or Video (composite) picture connections. The example given connects a DVD/VCR Combi unit to the INPUT-AV 2 jacks on the rear of the TV.

***NOTE:** The accessory device must have an S-VIDEO output jack to make the connection explained on this page.*

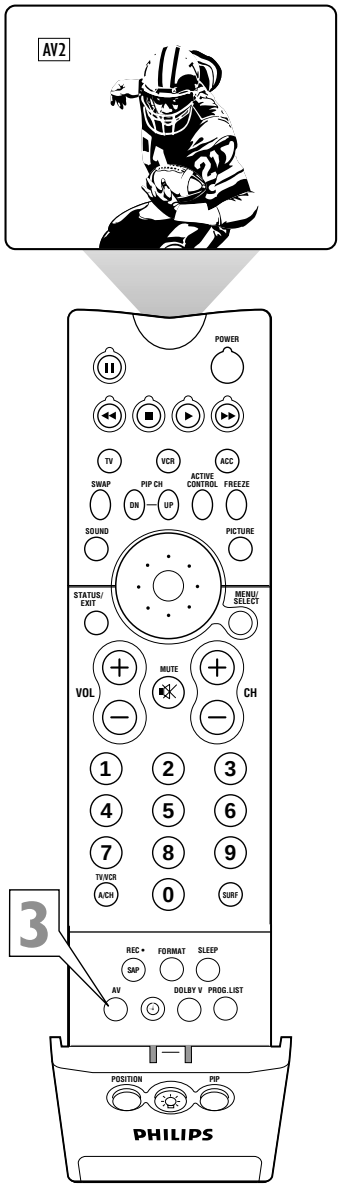
To make the connections, you will need:

- *one S-Video cable*
- *two cables for audio connections (standard RCA connectors).*

***NOTE:** The cables are not supplied with your TV. You should be able to buy them at most stores that sell electronics. Or you can call our Customer Care Center at 1-800-531-0039.*



*(Example: Philips DVD/VCR Combi model DV910VHS)



1 **Connect the S-VIDEO OUT jack** on the rear of the accessory device to the INPUT-AV 2 S-VIDEO jack on the rear of the TV.

2 **Connect the DVD/VCR AUDIO OUT jacks** on the rear of the accessory device to the INPUT-AV 2 AUDIO input jacks on the rear of the TV.

3 **Press the AV button on the remote control** as many times as necessary to select the AV2 source for the viewing of materials from your S-Video device.

HELPFUL HINTS

- To simplify making connections, audio cables are often color coded: red for the right channel, and white for the left channel. The jacks on your TV are likewise color coded to match the connectors. To make S-Video connections, you must use an S-Video cable.
- You can also connect a satellite receiver, laser-disc player, video-game player, or other accessory device with S-Video capability to the TV in a manner similar to example shown on this page.
- If you connect a satellite receiver to the TV, you will need to use the receiver's channel-memorization system to store channels in the receiver's memory.

WARNING

Video sources that show a constant nonmoving pattern on the TV screen can cause picture tube damage. When you are not using your video accessory devices, turn them off. Also, regularly alternate the use of accessory video sources with normal TV viewing. See page 60.

Connecting an HD Receiver to the HD INPUT-AV 4 Jacks

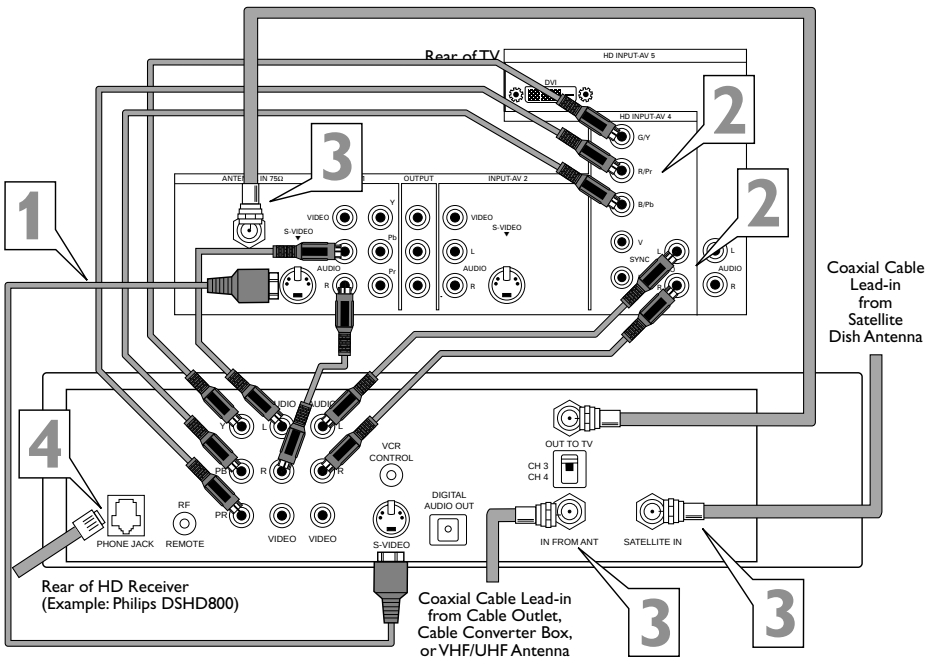
Digital equipment with a 1080i or 480p output, is compatible with the HD INPUT-AV 4 video jacks.

***NOTE:** This television is designed to be compatible with high-definition signal standards 1080i and 480p as specified by the Electronic Industries Association standard EIA770.3. Because output standards may vary by manufacturer, you may encounter some digital equipment that will not properly display pictures on the TV.*

To make the connections shown in this example, you will need:

- *one S-VIDEO cable*
- *three cables for video connections (standard RCA connectors)*
- *four cables for audio connections (standard RCA connectors)*
- *one coaxial cable (75Ω).*

***NOTE:** The cables are not supplied with your TV. You should be able to buy them at most stores that sell electronics. Or you can call our Customer Care Center at 1-800-531-0039.*



1 **Connect S-VIDEO and audio cables.**
NOTE: This example uses INPUT-AV 1. You can use INPUT-AV 2 or the side input jacks if you want.
- Connect an S-VIDEO cable from the HD receiver's S-VIDEO jack to the TV's INPUT-AV 1 S-VIDEO jack.
- Connect from the HD receiver's AUDIO L(eft) and R(ight) jacks to the TV's INPUT-AV 1 L(eft) and R(ight) AUDIO jacks.

2 **Connect component video and audio cables** to the TV's HD inputs.
- Connect from the YPbPr jacks on the HD receiver to the TV's HD INPUT-AV 4 G/Y, R/Pr, B/Pb jacks.
- Connect from the HD receiver's AUDIO L(eft) and R(ight) jacks to the TV's HD INPUT-AV 4 L(eft) and R(ight) AUDIO jacks.

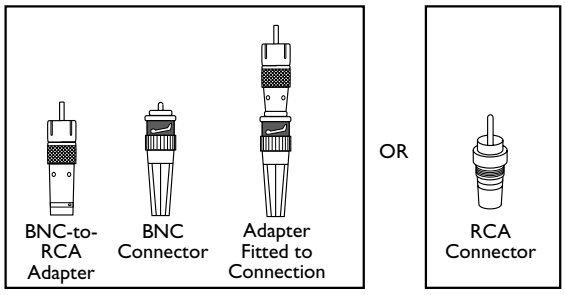
3 **Connect coaxial cables.**
- Connect the coaxial cable lead-in from your cable outlet, cable converter box, or VHF/UHF antenna to the IN FROM ANT jack on the HD receiver.
- Connect a coaxial cable from the OUT TO TV jack to the ANTENNA IN 75Ω jack on the TV.
- Connect the coaxial cable lead-in from a satellite dish antenna to the SATELLITE IN jack on the HD receiver.

4 **Connect your phone line to the PHONE JACK** on the HD Receiver.

5 **Refer to the directions-for-use manual that came with the HD receiver** for setup instructions.

Helpful Hints

- Making a standard connection along with the HD connection as shown in the example (S-VIDEO) on this page will allow you to see the receiver's on-screen menu and a picture (valid signal) from the receiver should it be switched to SD mode.
- The HD INPUT-AV 4 jacks are for standard RCA connectors. Your HD receiver may use RCA or BNC output jacks. If your HD receiver comes with BNC jacks, you will need to purchase BNC-to-RCA adapters to connect the receiver to the TV. You should be able to purchase these adapters at most stores that sell electronics. Or you can call our Customer Care Center at 1-800-531-0039.



- The HD INPUT-AV 4 jacks are compatible with some digital equipment having RGB outputs with "sync on green" or RGB with "separate H and V sync." Output standards for digital equipment, however, may vary by manufacturer. No industry standards have been established for HD television RGB signal systems, timing, synchronization, and signal strengths. If the digital equipment you want to connect to your TV offers both component video and RGB outputs, component video is the suggested connection to use.
- The default color-space setting for the HD INPUT-AV 4 jacks is YPbPr. RGB is also an option. If the picture color looks grossly incorrect, try changing either the receiver's or TV's color space. See the receiver's directions-for-use manual for information on setting its color space. Or see page 59 in this manual for setting the TV's AV4 color space.
- AV4 and AV5 do not function with the PIP feature. They cannot be displayed in the PIP window, nor can the PIP window be displayed when those signal sources are being viewed on the main screen.

Connecting a Camcorder

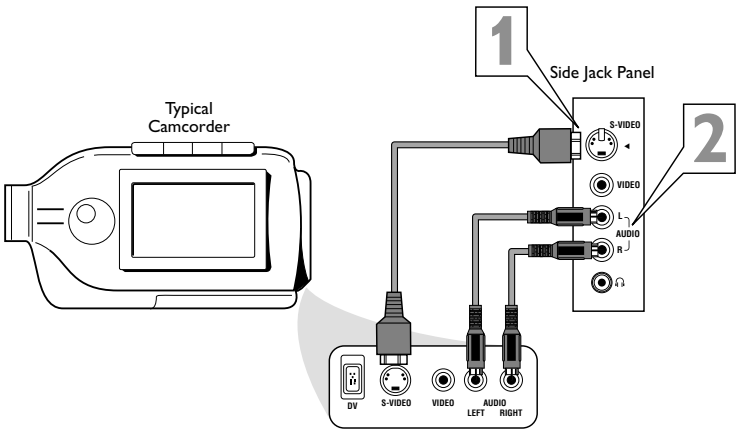
The side panel jacks provide a convenient way for you to connect a camcorder to your TV. The side panel jacks are recognized by your TV as AV3.

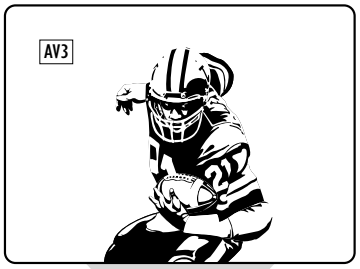
You can obtain S-VIDEO quality with an S-VHS, Hi-8, or digital camcorder by connecting to the S-VIDEO input instead of the VIDEO (composite) input.

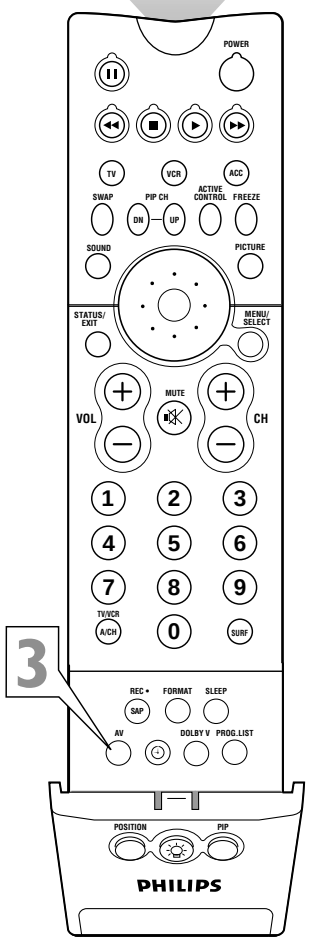
To make the connections shown in this example, you will need:

- *an S-VIDEO cable*
- *two cables for audio connections (standard RCA connectors).*

***NOTE:** The cables are not supplied with your TV. You should be able to buy them at most stores that sell electronics. Or you can call our Customer Care Center at 1-800-531-0039.*







1 **Connect from the S-VIDEO output** on the camcorder to the S-VIDEO input in the TV's side panel.

2 **Connect from the AUDIO outputs on the camcorder** to the side panel AUDIO L(eft) and R(ight) inputs.

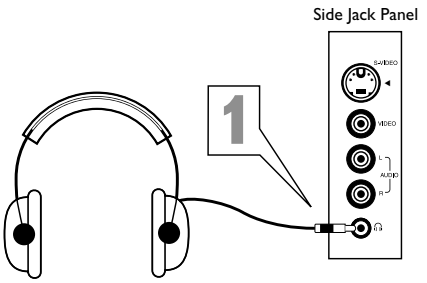
3 **Press the AV button on the remote control** as many times as necessary to select the AV3 source for the viewing of materials from your camcorder.

Helpful Hint

To simplify making connections, the connectors on audio cables are often color coded: red for the right channel, and white for the left channel. The jacks on your TV are likewise color coded to match the connectors. To make S-Video connections, you must use an S-Video cable.

Connecting and Using Headphones with Your TV

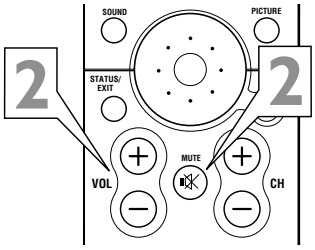
The TV's side panel has a headphone jack for personal listening.



1 **Insert the headphone plug** into the headphone jack in the TV's side panel.

2 **Turn down the TV's volume or press the Mute button on the remote control** to turn off the TV's internal speakers. See the section below for information on adjusting headphone volume and balance.

NOTE: The headphone impedance must be between 8 and 4,000 ohms. The headphone jack is stereo and 3.5 mm in size.



The HEADPHONE controls allow you to adjust the volume and balance of the sound going to the headphones.

1 **Press the MENU/SELECT button** on the remote control to show the on-screen menu.

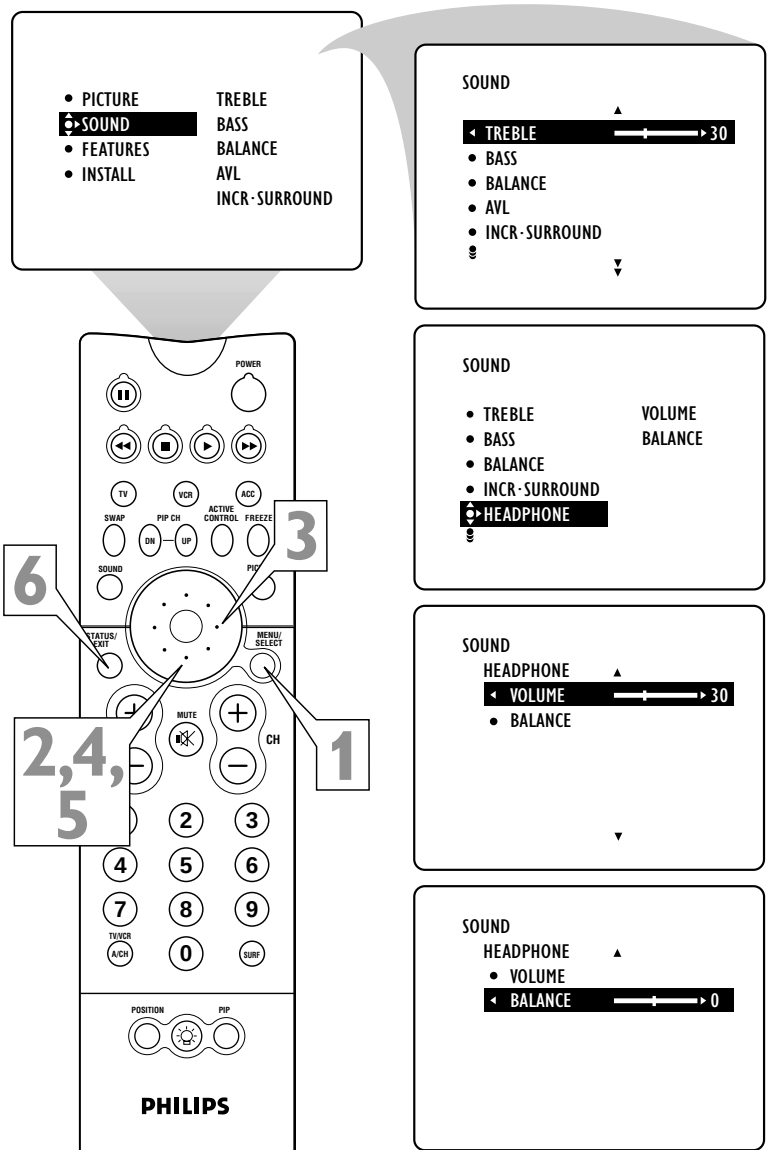
2 **Press the CURSOR RING DOWN** once to highlight SOUND.

3 **Press the CURSOR RING RIGHT** to enter the SOUND submenu.

4 **Press the CURSOR RING DOWN** repeatedly until HEADPHONE is highlighted. Then press the CURSOR RING RIGHT to enter the HEADPHONE submenu.

5 **Press the CURSOR RING DOWN or UP** to highlight VOLUME or BALANCE. Then press the CURSOR RING LEFT or RIGHT to adjust the control.

6 **Press the STATUS/EXIT button** to exit the menu.



Helpful Hint

The AVL, INCR. SURROUND, and BASS BOOST controls do not function with the headphones.

PROGRAMMING THE TV REMOTE TO WORK ACCESSORY DEVICES

Your TV remote is capable of working not only your TV but also other infrared remote (IR) controlled devices such as VCRs, cable TV converter boxes, satellite receivers, DVD players, and laser-disc players.

If you want to use your TV remote to operate a VCR or other accessory device, you will need to perform this initial check explained in this section. You may also need to go to the sections on the "Code-entry Method" and the "Search Method" in the pages that follow.

1 **Press the VCR or ACC(essory) mode button** on the TV remote for the desired accessory device category.

NOTE: Pressing the VCR mode button allows access to product codes for VCRs. Pressing the ACC(essory) mode button allows access to the product codes for cable TV converters, satellite receivers, DVD players, and laser-disc players.

2 **Point the TV remote toward the desired accessory device and press the POWER button.**

Does the remote turn the accessory device on?

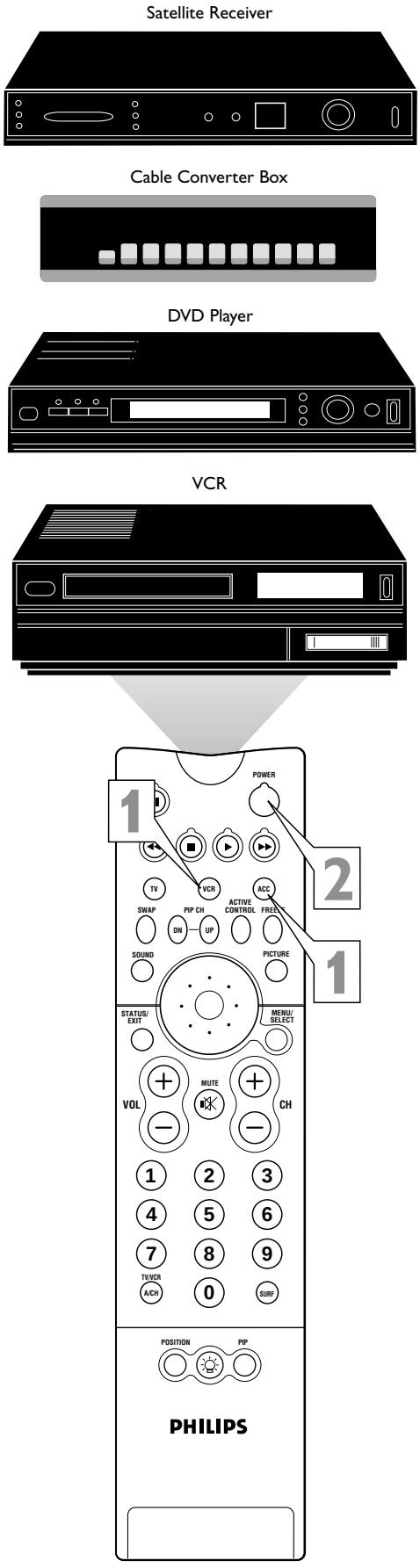
If yes, STOP and try other function buttons on the TV remote. With a VCR, for example, try the Play, Stop, and Rewind buttons, for example. (See page 23 for information on how the remote buttons correspond with accessory device functions.) If they also work the accessory device, then the remote is ready and no further steps are needed.

If not, do the following:

Look up a four-digit remote code number on pages 21 or 22 for your brand of accessory device. Then go through the simple steps for entering a four-digit code as explained on page 19.

HELPFUL HINT

If more than one four-digit code number is listed, you may have to try more than the first number given to locate your device's correct code.



USING THE CODE-ENTRY METHOD TO PROGRAM YOUR TV REMOTE

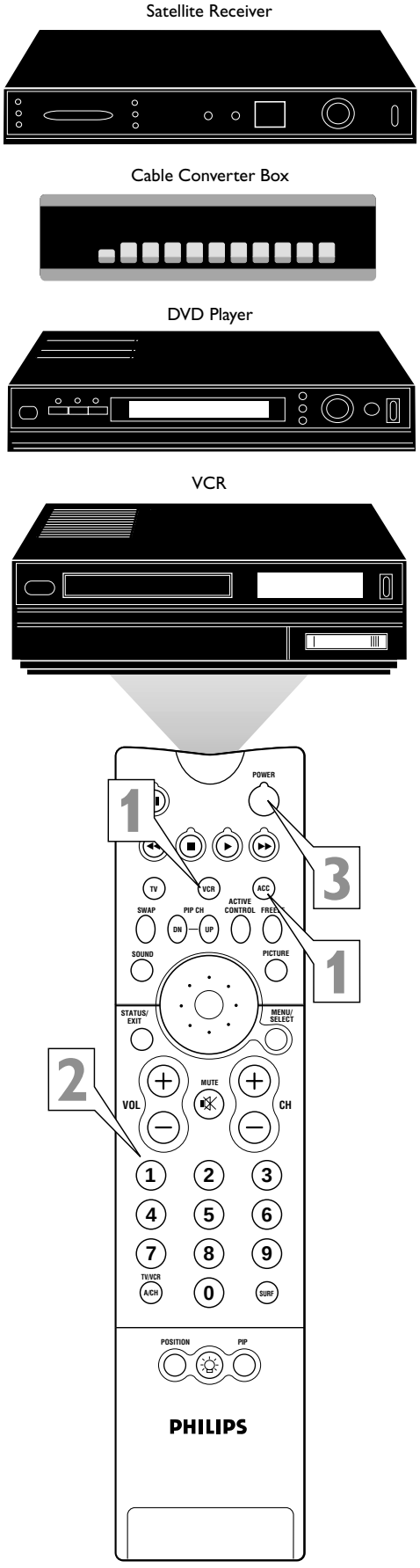
Now that you have looked up the four-digit remote-control Direct-entry Code for your brand of accessory device, you are ready to follow the simple steps shown below to program your TV remote.

Please read through all the steps before beginning.

1 **First, press and hold down the VCR or ACC (for an accessory device other than a VCR) mode button** on the TV remote. Then press and hold down the MENU/SELECT button at the same time for a brief moment. Release the buttons. The TV remote back light will switch on.
NOTE: For correct operation, you must first press and hold the mode button and then press and hold the MENU/SELECT button simultaneously.

2 **Within 30 seconds of pressing the VCR (or ACC) button and MENU/SELECT button, enter a four-digit code for the accessory device** (see pages 21 and 22).
If you make a mistake while attempting to enter the four-digit code and want to start again, press any button other than one with a number. Then return to step 1 to begin again.

3 **Point the remote at the accessory device.** Then press the POWER button on the remote to turn the device on.



HELPFUL HINTS

- If you do not enter a complete code within 30 seconds, you will need to perform step 1 of the Code-entry Method again.
- If you enter more than four digits, the unit will retain the first four digits entered.
- If the procedure explained above does not work the first time, repeat the steps using the same remote code number.
- If after a second try the remote does not operate your accessory device, and more code numbers are listed for your brand, use the next listed code number.
- If after repeated attempts the Entry-code Method does not allow you to work your accessory device with your TV remote, try the Search Method explained on the next page.

USING THE SEARCH METHOD TO PROGRAM YOUR TV REMOTE

Your TV remote can be set to work various accessory devices (VCRs, cable converters, and satellite receivers, for example) by what is called the Search Method.

***NOTE:** The Search Method works only with devices equipped with channel-display indicators on the devices themselves or the ability to show channel numbers on the TV screen. If the Code-entry Method (shown in the previous section) did not enable your TV remote to work your accessory device, then follow the easy steps listed below. Please read the steps once before performing them.*

1 **Turn on the desired device. Press and hold down the VCR or ACC (for an accessory device other than a VCR) mode button** on the TV remote. Then press and hold down the SURF button as you hold down the desired mode (VCR or ACC) button.

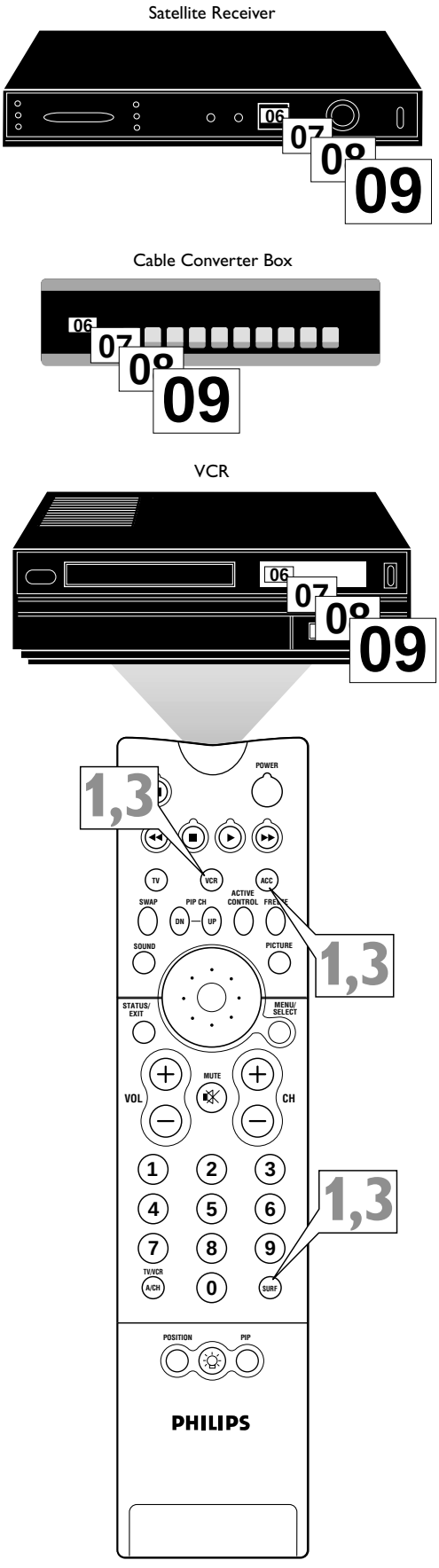
NOTE: For correct operation, you must press and hold down the desired mode (VCR or ACC) button first and then press and hold down the SURF button second.

While holding down the SURF and the desired mode (VCR or ACC) buttons simultaneously, point the remote toward the accessory device and continue holding the buttons down.

2 **Watch the Channel Indicator on your accessory device.** Channel numbers will scan up when the TV remote has identified the correct code for your accessory device. This may take several minutes.

3 **Release the mode (VCR or ACC) and SURF buttons as soon as channel numbers start to scan up.** The scanning means that your TV remote has found the code for your accessory device.

NOTE: If no channel change happens after several minutes, repeat steps 1 and 2. Then if a channel change still does not occur, the remote will not work with the desired accessory device.



HELPFUL HINTS

- The remote's back light will blink as the remote moves through its product code list. After the remote identifies the product code for your accessory device and you release the remote buttons, the back light will blink twice.
- Your TV remote may locate the accessory device's code quickly or within several minutes.
- Don't let the accessory device scan up more than five channels when the correct code is found—the remote may pass up the right code and have to repeat the search cycle.

Direct-entry Codes for A/V Accessory Devices

VCR

	Code number
Admiral	0075, 0236
Adventura	0027
Aiko	0305
Aiwa	0334, 0495, 0027, 0064
Akai	0133, 0080, 0068, 0076, 0088, 0183, 0269
America Action	0305
American High	0062
Asha	0267
Audiovox	0064
Beaumark	0267
Bell & Howell	0131
Broksonic	0148, 0211, 0029, 0236, 0238, 0322, 0388, 0506
CCE	0099, 0305
Calix	0064
Canon	0194, 0062, 0129
Capehart	0047
Carver	0108
Cineral	0305
Citizen	0305, 0064
Colt	0099
Craig	0064, 0099, 0074, 0267, 0298
Curtis Mathes	0062, 0068, 0087, 0189
Cybernex	0078, 0267
Daewoo	0305, 0588, 0047, 0072
Daytron	0047
Denon	0069
Dynatech	0027
Electrohome	0064
Electrophonic	0064
Emerex	0059
Emerson	0211, 0029, 0236, 0305, 0063, 0148, 0238, 0588, 0235, 0321, 0506, 0088, 0115, 0239, 0027, 0064, 0070, 0095, 0322, 0388, 0537
Fisher	0074, 0131, 0081, 0093
Fuji	0060, 0062
Funai	0027
GE	0062, 0087, 0075, 0092, 0229, 0267
Garrard	0027
Go Video	0306, 0459, 0553, 0259
GoldStar	0064, 0045, 0065, 0498, 0507
Gradiente	0035, 0027, 0435
Grundig	0222
HI-Q	0074
Harley Davidson	0027
Harman/Kardon	0065, 0102, 0108
Harwood	0095, 0099
Headquarter	0073
Hitachi	0069, 0193, 0132, 0092, 0027, 0068, 0109
Hughes Network Systems	0069
JVC	0094, 0035, 0233, 0234, 0068, 0411
Jensen	0068
KEC	0064, 0305
KLH	0099
Kenwood	0068, 0094, 0411, 0065
Kodak	0062, 0064
LXI	0064
Lloyd's	0027, 0235
Logik	0099
MEI	0062
MGA	0070, 0088, 0267
MGN Technology	0267
MTC	0027, 0267
Magnasonic	0305
Magnavox	0062, 0108, 0137, 0130, 0027, 0066, 0176
Magnin	0267
Marantz	0108, 0062
Marta	0064
Matsushita	0062, 0189, 0481
Memorex	0131, 0074, 0506, 0027, 0064, 0075, 0062, 0073, 0267, 0334, 0066, 0189, 0236, 0481, 0828, 0829
Minolta	0132, 0069
Mitsubishi	0200, 0088, 0102, 0241, 0269, 0070, 0075, 0094, 0470
Motorola	0062, 0075
Multitech	0027, 0099
NAD	0085
NEC	0065, 0067, 0068, 0077, 0094, 0109, 0131
Nikko	0064
Nikon	0061, 0280
Noblex	0267
Olympus	0062, 0253
Optimus	0189, 0481, 0827, 0828, 0075, 0085, 0829, 0064, 0131, 0459
Optonica	0089
Orion	0506, 0029, 0211, 0236, 0322
Panasonic	0062, 0189, 0828, 0481, 0253, 0104, 0405, 0829, 0129, 0252, 0254, 0273, 0827
Penney	0062, 0267, 0064, 0069, 0065, 0067, 0081
Pentax	0069, 0092, 0132
Philco	0062, 0236, 0506
Philips	0108, 0062, 0089, 0137, 0830, 0831
Pilot	0064
Pioneer	0085, 0195, 0094
Polk Audio	0108
Portland	0047
Profitronic	0267
Proscan	0087, 0229
Protec	0099
Pulsar	0066, 0078
Quarter	0073
Quartz	0073
Quasar	0062, 0189, 0104, 0481, 0828
RCA	0087, 0176, 0229, 0069, 0132, 0085, 0062, 0075, 0092, 0104, 0133, 0267, 0304
Radio Shack	0027
Radix	0064
Randex	0064
Realistic	0027, 0131, 0074, 0075, 0064, 0062, 0089, 0073, 0093
Ricoh	0061, 0280
Runco	0066
STS	0069
Salora	0102
Samsung	0072, 0078, 0080, 0267
Sanky	0066, 0075
Sansui	0068, 0506, 0027, 0094, 0109, 0236, 0298
Sanyo	0074, 0073, 0131, 0267
Scott	0211, 0238, 0148, 0070, 0072, 0237, 0239
Sears	0081, 0132, 0064, 0069, 0027, 0062, 0073, 0074, 0093, 0131
Semp	0072
Sharp	0075, 0089
Shintom	0099
Shogun	0078, 0267
Singer	0099
Sony	0060, 0061, 0059, 0280, 0027, 0038, 0062
Sunpak	0280
Sylvania	0062, 0108, 0027, 0070, 0130, 0137
Symphonic	0027
TMK	0063, 0235, 0267
Tatung	0068
Teac	0027, 0068
Technics	0062, 0189, 0273
Teknika	0027, 0062, 0064, 0079
Thomas	0027
Toshiba	0072, 0237, 0239, 0070, 0093, 0393
Totevision	0064, 0267
Unitech	0267
Vector	0072
Vector Research	0065, 0067
Video Concepts	0067, 0072, 0088, 0248
Videosonic	0267
Wards	0062, 0087, 0089, 0027, 0074, 0239, 0267, 0069, 0075, 0099, 0108, 0176
White Westinghouse	0099, 0305, 0236
XR-1000	0099, 0027, 0062
Yamaha	0065
Zenith	0066, 0027, 0060, 0061, 0236, 0506

DVD Player

	Code number
Denon	0859
GE	0862
Harman/Kardon	0871
Hitachi	0870
JVC	0868
Kenwood	0865
Magnavox	0860
Marantz	0866
Mitsubishi	0861
Onkyo	0860
Optimus	0869
Panasonic	0859
Philips	0866, 0860
Pioneer	0869, 0863
Proscan	0862
RCA	0862, 0869
Samsung	0870
Sony	0864
Technics	0859
Theta Digital	0869
Toshiba	0860
Yamaha	0859, 0867
Zenith	0872, 0860

See the next page for more codes.

Direct-entry Codes for A/V Accessory Devices

Laser-disc Player

	Code number
ADS	0880
Aiwa	0855
Carver	0853, 0850, 0858
Denon	0851, 0849, 0875
Disco Vision	0848
Funai	0855
Harman/Kardon	0853
Hitachi	0848
Kenwood	0877
Magnavox	0853, 0857, 0875
Marantz	0853, 0850
Mitsubishi	0849
NAD	0849
NEC	0879
Nikkodo	0884
Optimus	0849
Panasonic	0856
Philips	0853, 0850
Pioneer	0849, 0848
Polk Audio	0853
Quasar	0856
RCA	0881, 0874
Realistic	0855
Samsung	0858
Sega	0848
Sharp	0873
Sony	0854, 0852, 0878
Technics	0856
Theta Digital	0853
Victor	0876
Yamaha	0857

Cable Converter Box

	Code number
ABC	0030, 0028, 0034, 0035, 0038, 0040, 0041, 0044, 0060
Allegro	0180, 0342
Antronix	0049, 0234
Apache	0797
Archer	0049, 0066, 0180, 0234, 0824
BBT	0294
Belcor	0083
Bell & Howell	0041
Cable Star	0083
Cabletenna	0049
Cableview	0049
Century	0180
Citizen	0180, 0342
Colour Voice	0052, 0058
Comband	0259
Comtronics	0067, 0087
Contec	0046
Digi	0664
Eastern	0029
Emerson	0824
Everquest	0042, 0067
Focus	0427
GC Electronics	0083, 0234
GE	0259
Garrard	0180
Gemini	0042, 0097, 0269, 0824
General Instrument	0303, 0038, 0503, 0837
GoldStar	0067, 0171
Goodmind	0797, 0824
Hamlin	0047, 0036, 0286, 0061, 0300
Hitachi	0038
Hytex	0034
Jasco	0042, 0180, 0342
Jerrold	0030, 0039, 0303, 0041, 0503, 0038, 0051, 0042, 0837
Linsay	0467
Macom	0060
Magnavox	0054
Memorex	0027
Movie Time	0090, 0183
NSC	0183, 0090, 0097
Nexus	0797
Novaplex	0645
Oak	0046, 0034
Optimus	0048
Panasonic	0048, 0134, 0027
Panther	0664
Paragon	0027
Philips	0052, 0058, 0269, 0317, 0054, 0180
Pioneer	0171, 0050, 0560
Popular Mechanics	0427
Prelude	0797
Pulsar	0027
Quasar	0027
RCA	0048
Radio Shack	0042, 0847, 0342, 0824
Realistic	0234
Recoton	0427
Regal	0300, 0047, 0286
Regency	0029
Rembrandt	0038, 0097
Runco	0027
SL Marx	0067
Samsung	0067, 0171
Scientific Atlanta	0035, 0044, 0033, 0504
Seam	0537
Signal	0042, 0067
Signature	0038
Sprucer	0048
StarSight	0569, 0449
Starcom	0030, 0042
Stargate	0067, 0042, 0797, 0824
Starquest	0042
Sylvania	0028
TFC	0337
TV86	0090
Tandy	0285
TeleCaption	0248
Teleview	0067
Texscan	0028
Timeless	0445
Tocom	0039, 0040
Toshiba	0027
Tusa	0042
Unika	0180, 0234, 0049
United Artists	0034
Universal	0234, 0049, 0066, 0083, 0180, 0218
Viewmaster	0847
Viewstar	0285, 0054, 0087, 0090
Zenith	0027, 0552, 0081
Zentek	0427

Satellite Receiver/Digital Satellite System

	Code number
AlphaStar	0799
Amplica	0099
Amway	0070, 0102
Arunta	0548
Astro Industries	0122
BMC	0114
BSR	0122
Cable Innovations	0581
Capetronic	0122
Century	0565
Channel Master	0045, 0239
Chaparral	0080, 0236, 0243
Citoh	0191
Conifer	0031
Curtis Mathes	0088, 0099
DX Antenna	0068
Drake	0091, 0272, 0045, 0176
EchoStar	0307, 0802, 0175, 0186, 0296
Expressvu	0802
GE	0593
General Instrument	0388, 0896, 0574, 0581, 0654
Gould	0082
HNS	0644
HTS	0802
Hitachi	0846
Homecable	0265
Hughes Network Systems	0776
Hytek	0122
IQ	0237
IQ Prism	0237
Intersat	0070
JVC	0802
Janeil	0179
Jerrold	0388, 0654
Legend	0296
Macom	0088, 0045
Magnavox	0749, 0751
Memorex	0296, 0751
Next Level	0896
Norsat	0031
Panasonic	0179, 0728
Philips	0227, 0749, 0751
Pico	0102
Primestar	0654, 0388
RCA	0593, 0170, 0882
Radio Shack	0581, 0896
Ramsey	0102
Realistic	0079, 0078
STS	0237, 0068
Sony	0666
Star Choice	0896
Star Trak	0207, 0448, 0574
Strong	0448
Toshiba	0109, 0776, 0817, 0088
Town & Country	0574
Uniden	0265, 0079, 0101, 0397, 0581, 0751, 0103, 0323, 0749
Zenith	0091, 0883, 0088

Television

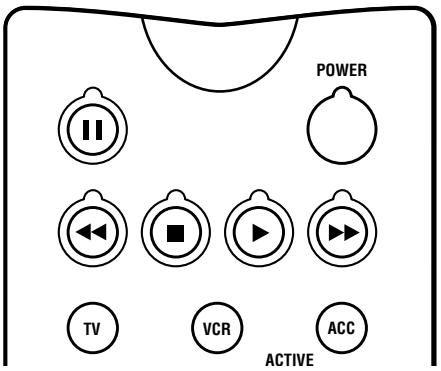
	Code number
Magnavox	0583

USING THE TV REMOTE WITH ACCESSORY DEVICES

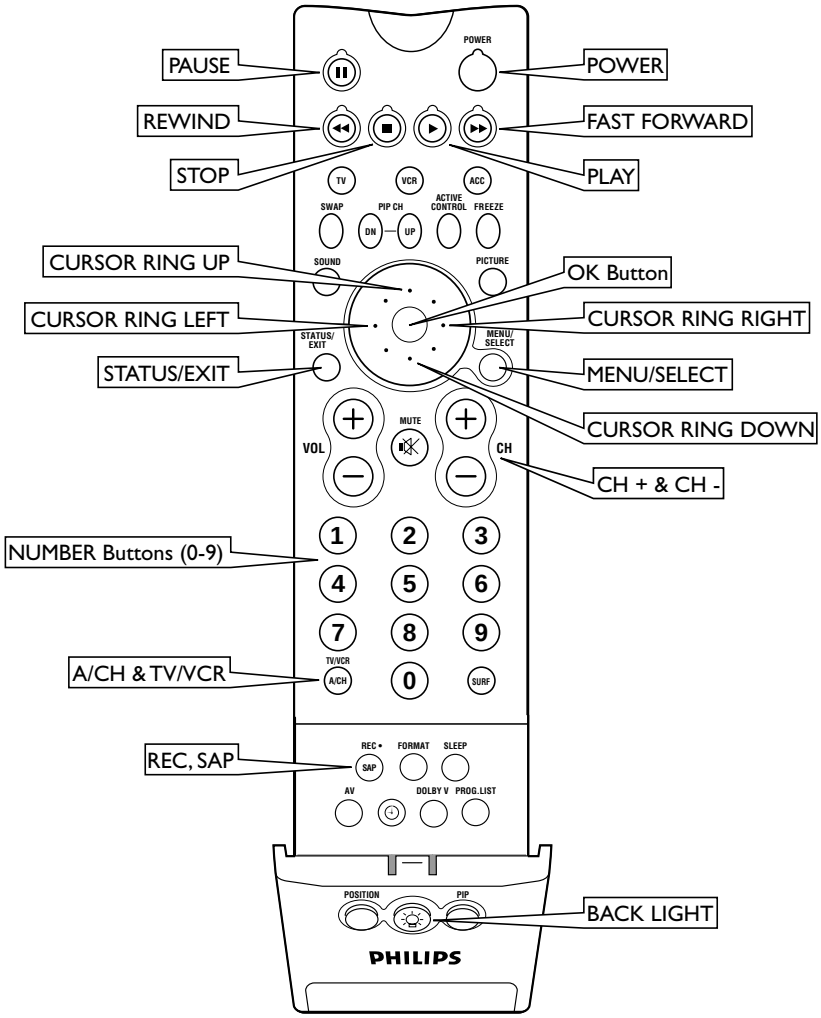
The Chart below provides you with common accessory-device functions associated with the buttons on your Philips TV remote control. (See pages 18–20 for information on programming your TV remote to operate accessory devices.)

NOTES:

- *Functions can vary according to the manufacturer's specifications for each accessory device.*
- *First press the VCR mode button to use the TV remote to operate a VCR.*
- *First press the ACC mode button to use the TV remote to operate a DVD player, laserdisc player, cable converter box, or satellite receiver/digital satellite system.*



TV Remote VCR and Accessory Mode Buttons



Button on TV Remote	Common VCR Function	Common DVD/LD Player Function	Common Cable Converter Box or Satellite Receiver/Digital Satellite System (DSS) Function
POWER	POWER	POWER	POWER
PAUSE	PAUSE	PAUSE	—
REWIND	REWIND	SEARCH REVERSE	—
STOP	STOP	STOP	—
PLAY	PLAY	PLAY	—
FAST FORWARD	FAST FORWARD	SEARCH FORWARD	—
CURSOR RING UP	CURSOR UP	CURSOR UP	CURSOR UP
CURSOR RING DOWN	CURSOR DOWN	CURSOR DOWN	CURSOR DOWN
CURSOR RING RIGHT	CURSOR RIGHT	CURSOR RIGHT	CURSOR RIGHT
CURSOR RING LEFT	CURSOR LEFT	CURSOR LEFT	CURSOR LEFT
OK Button	PROGRAM; MENU	MENU	MENU (also, GUIDE for satellite receivers/DSS)
STATUS/EXIT	EXIT	EXIT	EXIT
MENU/SELECT	SELECT	SELECT	SELECT
CH +	CHANNEL UP	NEXT	CHANNEL UP
CH –	CHANNEL DOWN	PREVIOUS	CHANNEL DOWN
NUMBER Buttons (0–9)	NUMBER SELECTION (0–9)	NUMBER SELECTION (0–9)	NUMBER SELECTION (0–9)
A/CH* and TV/VCR	TV/VCR, A/CH*	—	—
REC, SAP	RECORD (Press with PLAY Button)	—	—
BACK LIGHT**	BACK LIGHT**	BACK LIGHT**	BACK LIGHT**

*A/CH (Alternate Channel) allows you to switch between the currently viewed channel and the previously viewed channel.
**Press the BACK LIGHT button to light the white buttons on the remote.

USING THE AV AND SOURCE SELECT BUTTONS

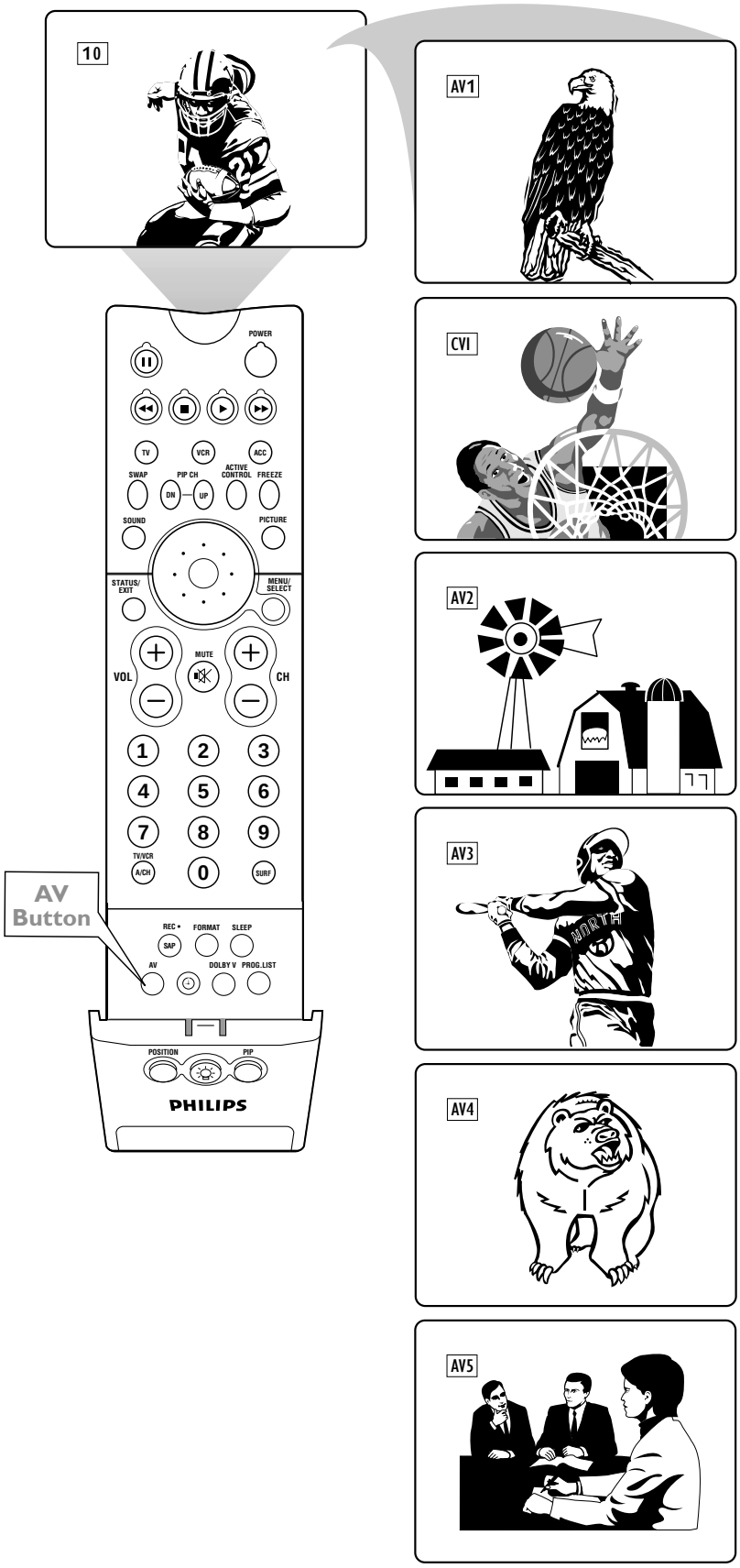
The AV button on the remote control and SOURCE SELECT button on the TV allow you to access the TV's signal-source inputs. With each press of the AV button, you can access a different signal-source input. The signal-source input jacks are located on the back and side panels of your TV. (See pages 6 and 7.)

Selecting a Signal Source Using the AV Button on the Remote Control

Press the AV button on the remote control as many times as necessary to select the signal source you want to watch.

Selecting a Signal Source Using the Source Select Button on the TV

Press the SOURCE SELECT button on the TV as many times as necessary to select the signal source you want to watch.

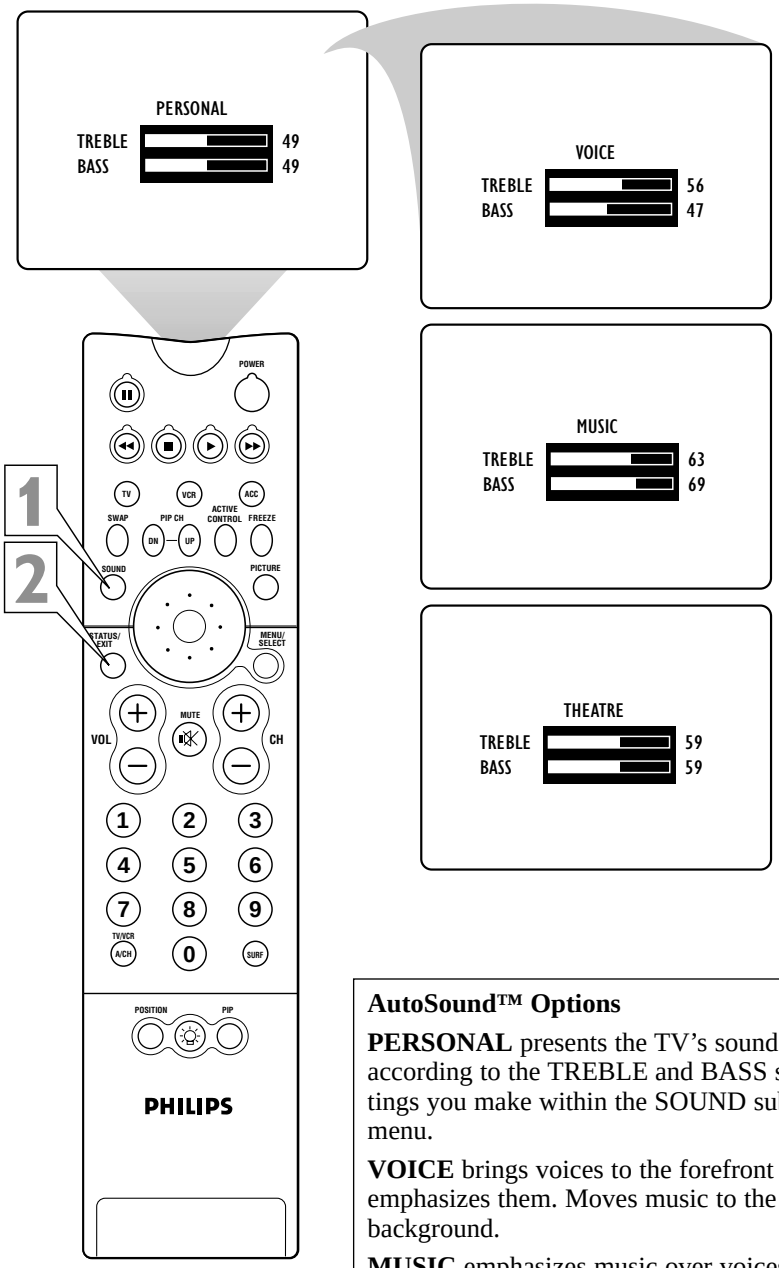


USING AUTOSOUND™

You can use the AutoSound™ options to automatically tailor the TV's sound for the type of program you are watching. The factory has set the VOICE, MUSIC, and THEATRE options. The settings for the PERSONAL option are the ones you select through the on-screen SOUND submenu. See descriptions of the options below, right.

1 **Press the SOUND button** on the remote control. The current AutoSound™ setting will appear on screen. **Press the SOUND button** repeatedly to cycle through the four options: PERSONAL, VOICE, MUSIC, or THEATRE.

2 **When you see the option you want on the screen, press the STATUS/ EXIT button** to exit the menu. The AutoSound™ option you selected is then active.



HELPFUL HINTS

- AutoSound™ works only with the programs coming through the ANTENNA IN 75Ω jack on the rear of the TV. AutoSound™ will not control the sound levels of the other jacks on the rear or side of the TV.
- If you select an AutoSound™ option other than PERSONAL, then the TREBLE and BASS settings specific to that option will also be written to the SOUND submenu items. At that point, the PERSONAL AutoSound™ option settings will not be changed. Only when you go into the SOUND submenu and change the TREBLE and BASS settings will those settings be reflected in the PERSONAL AutoSound™ option.

AutoSound™ Options

PERSONAL presents the TV's sound according to the TREBLE and BASS settings you make within the SOUND submenu.

VOICE brings voices to the forefront and emphasizes them. Moves music to the background.

MUSIC emphasizes music over voices.

THEATRE provides a balance between voices and music.

USING AUTOPICTURE™

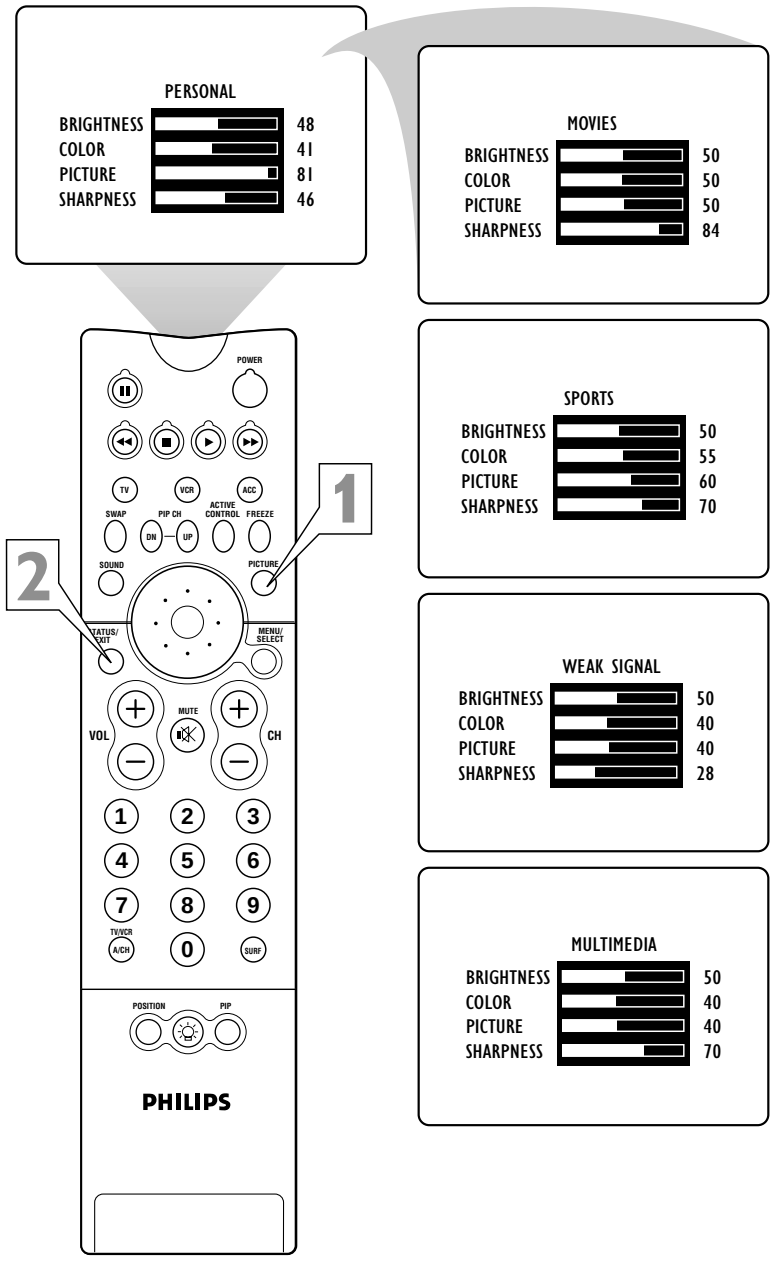
You can use an AutoPicture™ option to automatically tailor the TV's picture for certain types of input signals. The factory has set the MOVIES, SPORTS, WEAK SIGNAL, and MULTIMEDIA options. The settings for the PERSONAL option are the ones you select through the on-screen PICTURE submenu.

1 **Press the PICTURE button** on the remote control. The current AutoPicture™ setting will appear on screen. Then Press the PICTURE button repeatedly to cycle through the options: PERSONAL, MOVIES, SPORTS, WEAK SIGNAL, and MULTIMEDIA picture settings.

2 **When you see the option you want on screen, press the STATUS/EXIT button** to turn off the on-screen display. The AutoPicture™ option you selected is then active.

HELPFUL HINT

If you select an AutoPicture™ setting option other than PERSONAL, then the BRIGHTNESS, COLOR, PICTURE, and SHARPNESS settings specific to that option will also be written to the PICTURE submenu items. At that point, the PERSONAL AutoPicture™ option settings will not be changed. Only when you go into the PICTURE submenu and change the settings will those settings be reflected in the PERSONAL AutoPicture™ option.



USING AUTOSURF™

After you set up a list of your favorite signal sources in the SURF list, you can press the SURF button to see the list and quickly tune to a favorite signal source. Place up to 10 signal sources in the SURF LIST.

1 **Press the NUMBER buttons, CH(annel) +/– buttons, or the AV button** to select a signal source to add to the Surf list.

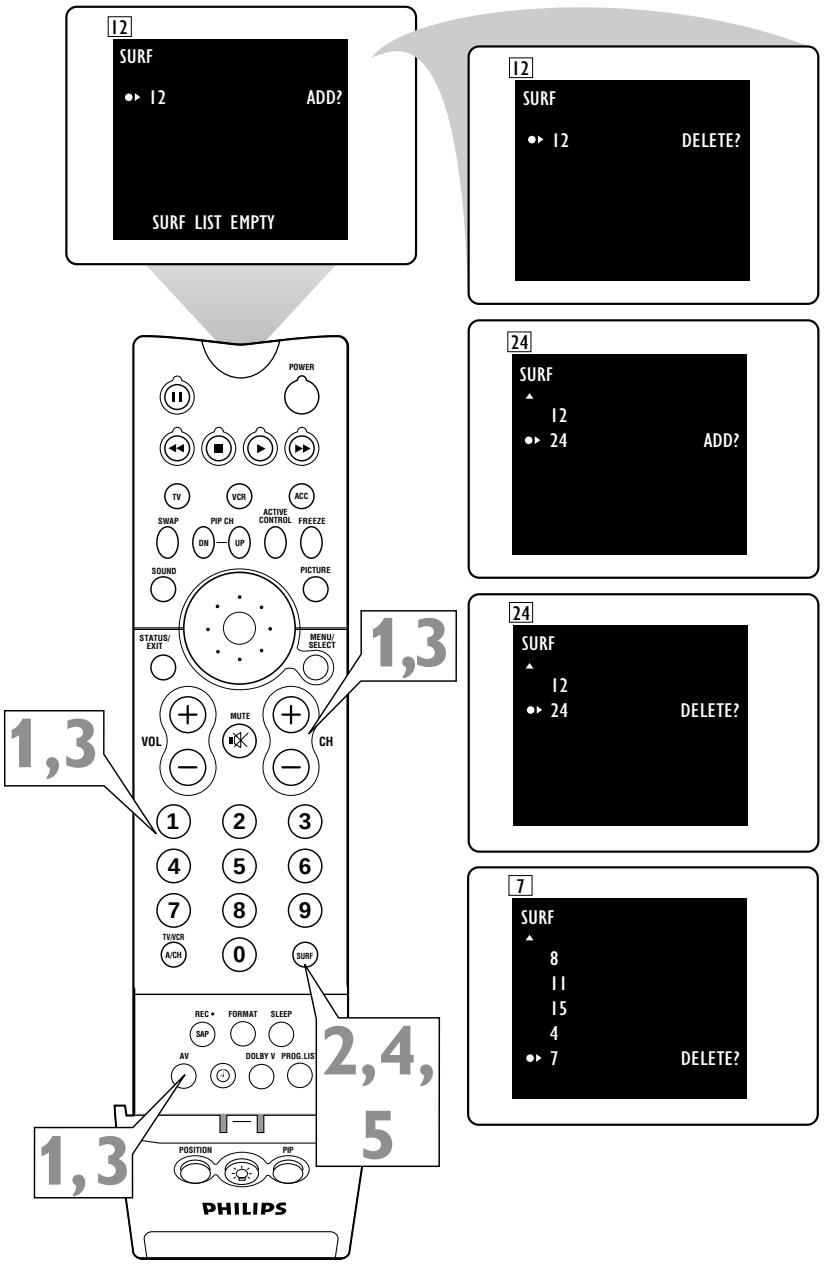
2 **Press the SURF button.** The Surf list box appears. The number of the current signal source is shown with ADD? to the right. (If you have not added any channels to the list, "SURF LIST EMPTY" appears on screen.) Press the CURSOR RING RIGHT to add the signal source to the Surf list.

3 **Press the NUMBER buttons, CH(annel) +/– buttons, or the AV button** to select another signal source to add to the Surf list. Press the SURF button and then the CURSOR RING RIGHT to add the signal source to the list.

Repeat this step, filling the list with up to 10 favorite signal sources. **NOTE:** If you exceed 10 signal sources, the first signal source on the list will be deleted from the list.

4 **To tune to a favorite signal source from the list, press the SURF button.** The Surf list box appears. Press the SURF button or the CURSOR RING DOWN or UP as many times as necessary to tune to the signal source.

5 **To delete a signal source from the list, press the SURF button.** The Surf list box appears. Press the SURF button or the CURSOR RING DOWN or UP as many times as necessary to select the signal source to be deleted. Then press the CURSOR RING RIGHT to delete the signal source.



HELPFUL HINT

Five signal sources can be shown in the Surf list box at one time. Press the CURSOR RING UP or DOWN to show any other signal sources that are in the list.

Using Program List and Alternate Channel

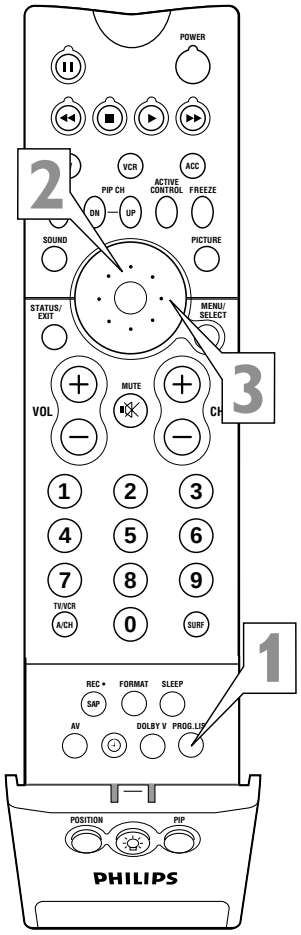
Program List

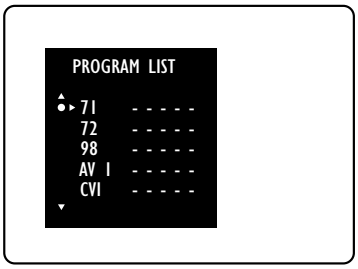
1 **Press the Program List button on the remote control** to display a list of channel numbers and their names (see the "Tuner Mode" "Auto Program," "Channel Edit," and "Name" sections on pages 4–6 in the *Quick Use and Setup Guide* that came with your TV for proper setup).

You can also access the Program List by pressing the button in the center of the Cursor Ring. Each channel will appear as a selectable item. The current channel will be highlighted by default. Only five channels will be shown in the list at one time.

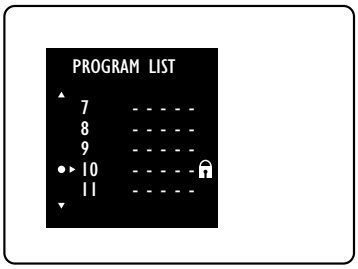
2 **Press the CURSOR RING UP or DOWN** to go through the list and highlight a channel.

3 **Press the CURSOR RING RIGHT** to tune to the highlighted channel. Channels marked "Skipped" in the "Channel Edit" control will not appear in the list. Any channel that is being blocked by AutoLock™ will appear with a padlock icon to indicate that the channel is not viewable.



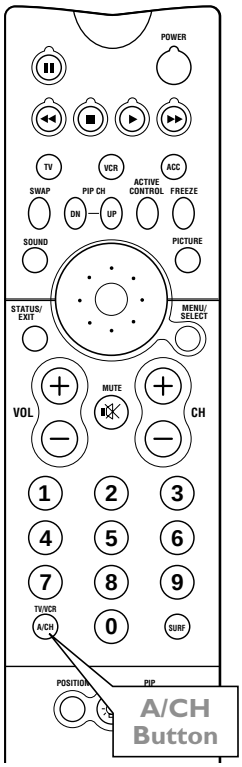


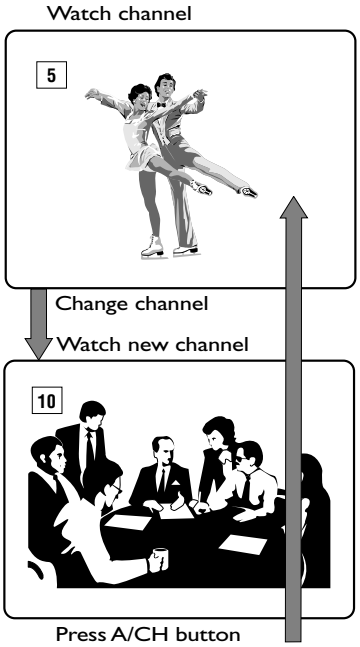
A padlock image will appear to the right of a channel or signal source that is being blocked by AutoLock™.



Alternate Channel (A/CH)

You can press the A/CH button on your remote control to go back and forth between the current channel and the previously watched channel.





USING THE SLEEP TIMER CONTROL

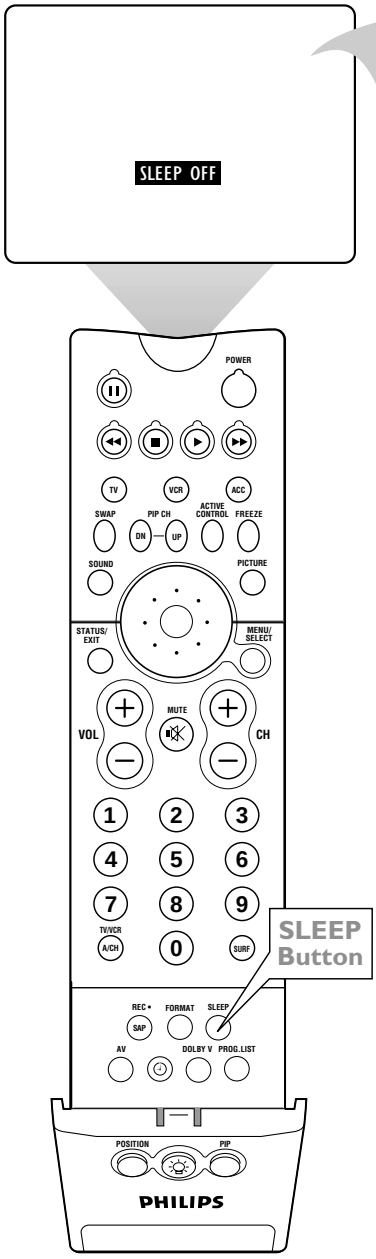
Have you ever fallen asleep in front of the TV? You can program your TV to turn off while you sleep. The Sleep Timer feature allows you to set your TV to turn off within a certain amount of time: 15, 30, 45, 60, 90, 120, 180, or 240 minutes.

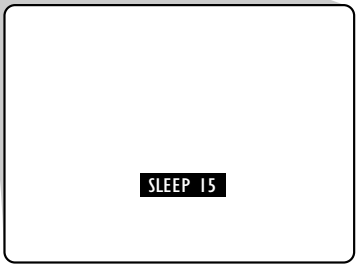
Press the SLEEP button on the remote control. (The SLEEP Timer on-screen display will appear on screen.) **Then within five seconds, press the SLEEP button again as many times as necessary** to select the amount of time you want to pass before the TV will turn itself off.

An on-screen countdown will appear during the last minute before the TV turns off. Ten seconds before the Sleep Timer turns the TV off, the on-screen display will show "Good Bye."

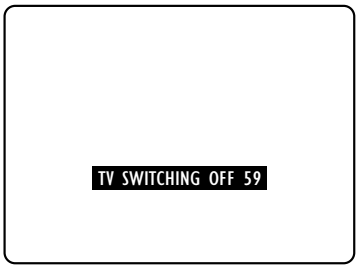
HELPFUL HINTS

- To see how many minutes remain before the TV shuts itself off, press the STATUS/EXIT button.
- Changing the channel or volume during the last minute of a Sleep Timer will cancel Sleep.

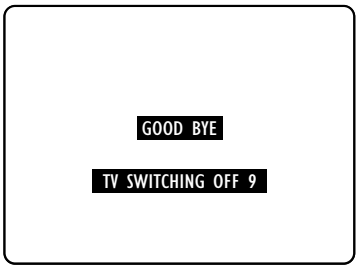




The Sleep Timer options are 15, 30, 45, 60, 90, 120, 180, or 240 minutes.



During the last minute of a Sleep Timer setting, an onscreen countdown will be displayed.



During the last 10 seconds of a Sleep Timer setting, "GOOD BYE" will be displayed on screen.

Adjusting the Picture Controls

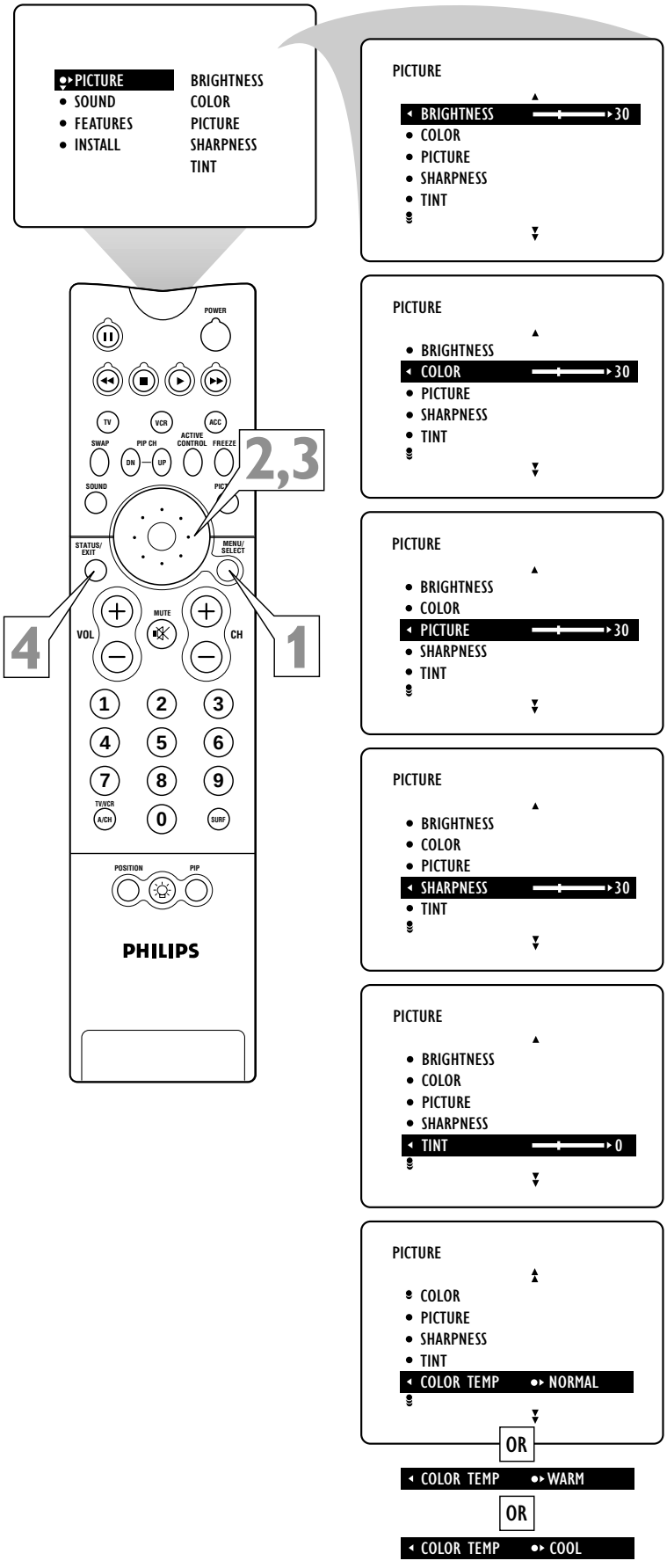
To adjust your TV picture controls, select a channel and follow these steps. See descriptions of the picture-adjustment options below.

1 **Press the MENU/SELECT button** on the remote control to show the on-screen menu.

2 **Press the CURSOR RING RIGHT.** BRIGHTNESS will be highlighted and an adjustment bar will be shown to the right.

3 **Press the CURSOR RING RIGHT or LEFT** to adjust the BRIGHTNESS level of the picture. Or press the CURSOR RING DOWN to select another picture control to adjust.

4 **Press the STATUS/EXIT button** to exit the menu.



Picture-adjustment Options

Remember, when the bar scale is centered ▬, the control settings are at normal, mid-range levels. Picture adjustments are described as follows:

BRIGHTNESS adds or subtracts light from the darkest part of the picture.

COLOR adds or eliminates color.

PICTURE improves the detail of the lightest parts of the picture.

SHARPNESS improves the detail in the picture.

TINT adjusts the picture to obtain natural skin tones.

COLOR TEMP offers NORMAL, COOL, or WARM picture preferences.

NORMAL keeps whites, white.

WARM makes whites, reddish.

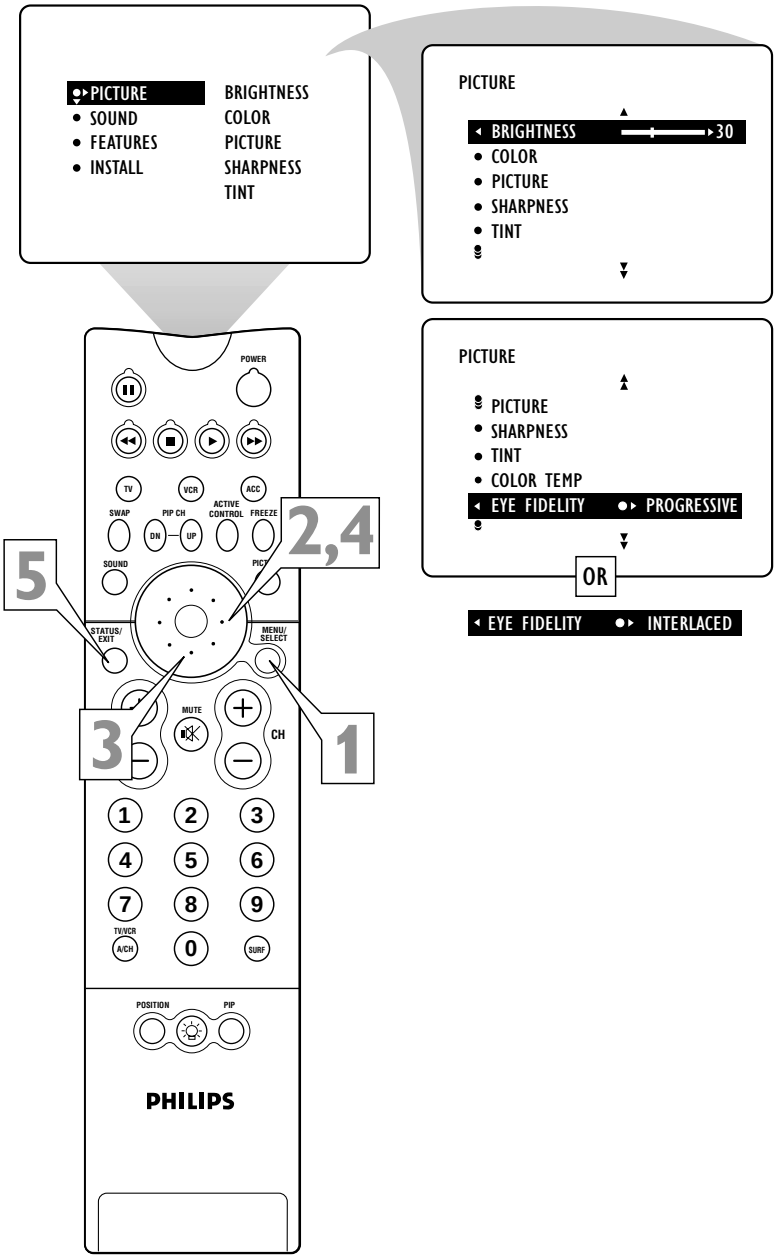
COOL makes whites, bluish.

SETTING THE EYE FIDELITY CONTROL

Eye Fidelity gives you a choice between two different scanning techniques—progressive or interlaced.

Progressive scan doubles the number of picture lines, eliminating line flicker and providing a jitter-free picture.

Interlaced improves the appearance of on-screen motion. It also helps smooth out jagged lines that are sometimes seen on curved and angled surfaces in the picture.



1 **Press the MENU/SELECT button** on the remote to show the on-screen menu.

2 **Press the CURSOR RING RIGHT** to enter the PICTURE submenu.

3 **Press the CURSOR RING DOWN** repeatedly until the EYE FIDELITY control is highlighted.

4 **Press the CURSOR RING RIGHT or LEFT** until you select the option you want, either PROGRESSIVE or INTERLACED.

5 **Press the STATUS/EXIT button** to turn the menu off.

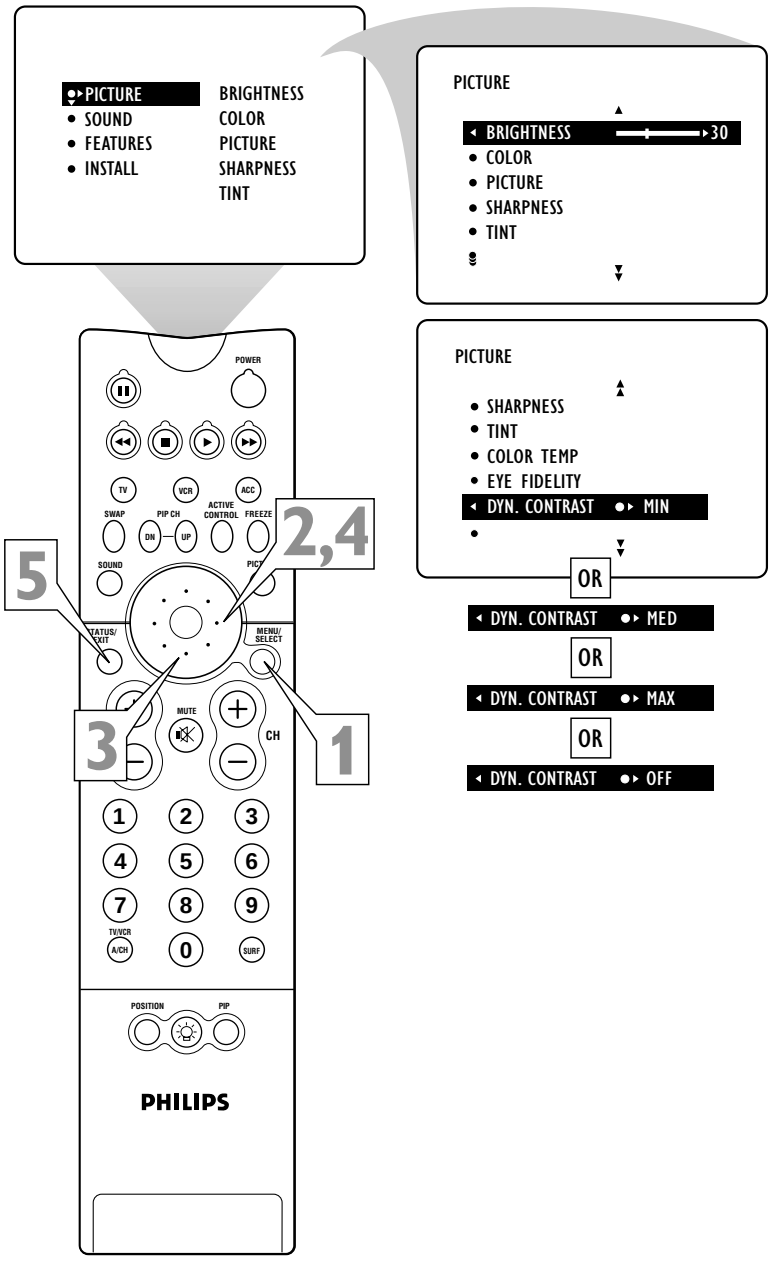
HELPFUL HINT

- The Eye Fidelity control is not available for use with AV4 and AV5.
- You may want to use the interlaced option to enhance programs containing a lot of motion.

Setting the Dynamic Contrast Control

The Dynamic Contrast control allows you to sharpen the picture quality by making dark portions of the picture darker and light portions of the picture more noticeable. Normally, you will probably want to select MED. In certain circumstances, however, you may prefer MIN or MAX.

1. **Press the MENU/SELECT button** on the remote control to show the on-screen menu.
2. **Press the CURSOR RING RIGHT** to enter the PICTURE submenu**.**
3. **Press the CURSOR RING DOWN** repeatedly until the DYN. CONTRAST control is highlighted.
4. **Press the CURSOR RING RIGHT or LEFT** until you select the option you want: MIN, MED, or MAX.
5. **Press the STATUS/EXIT button** to exit the menu.



Helpful Hint

The Dynamic Contrast control is not available for use with the AV4 and AV 5 signal sources.

ADJUSTING THE TREBLE, BASS, AND BALANCE CONTROLS

Besides the normal volume level control, your TV also has individual sound-adjustment controls. You can use TREBLE (high frequency), BASS (low frequency), and Speaker BALANCE to further adjust the sound playback of TV programs.

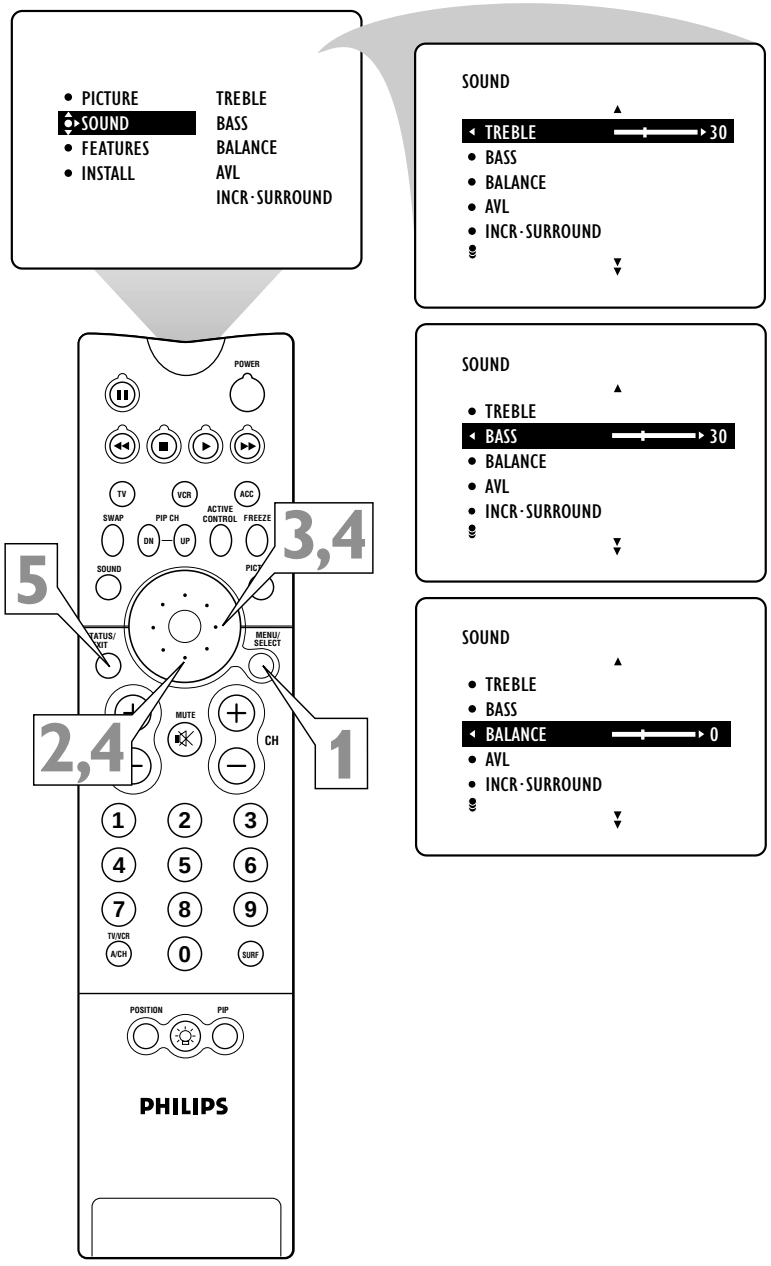
1 **Press the MENU/SELECT button** on the remote control to show the on-screen menu.

2 **Press the CURSOR RING DOWN** once to highlight SOUND.

3 **Press the CURSOR RING RIGHT** to enter the SOUND submenu.

4 **To adjust the TREBLE level of the television's sound, press the CURSOR RING RIGHT or LEFT. To adjust another sound control, press the CURSOR RING DOWN** until the control (BASS or BALANCE) is highlighted. Then press the CURSOR RING RIGHT or LEFT to adjust the selected control.

5 **Press the STATUS/EXIT button** to exit the menu.



HELPFUL HINT

When the bar scale is centered, speaker sound BALANCE is centered between the TV's left and right side speakers.

USING THE AVL (AUDIO VOLUME LEVELER) CONTROL

You may have noticed the peaks and valleys of sound that occur between program changes or at commercial breaks. The volume levels often vary considerably. By turning on the AVL (Audio Volume Leveler) control, you can make your TV produce a more consistent volume level. Follow these steps to turn the AVL control on.

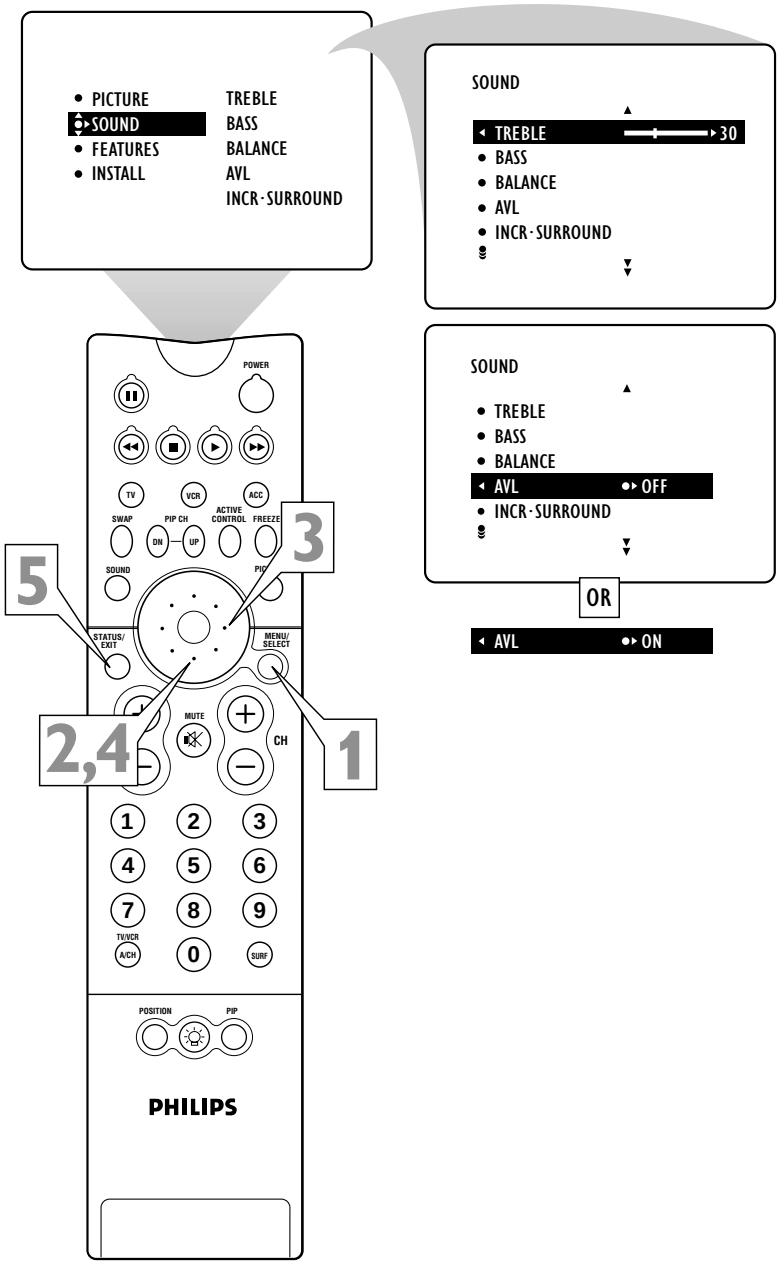
1 **Press the MENU/SELECT button** on the remote control to show the on-screen menu.

2 **Press the CURSOR RING DOWN** once to highlight SOUND.

3 **Press the CURSOR RING RIGHT** to enter the SOUND submenu.

4 **Press the CURSOR RING DOWN** repeatedly until AVL is highlighted. Then press the CURSOR RING RIGHT or LEFT to turn AVL ON or OFF.

5 **Press the STATUS/EXIT button** to exit the menu.



HELPFUL HINT

The AVL control does not function with the Dolby* Virtual feature, so the option disappears from the SOUND submenu when you select DOLBY VIRTUAL.

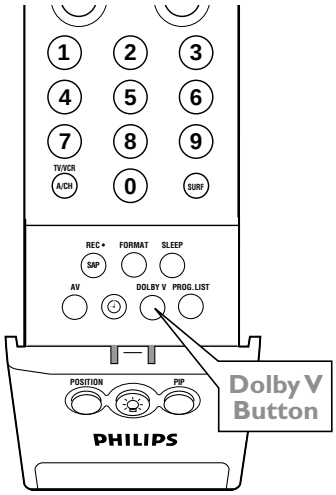
*Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

SELECTING THE SURROUND-SOUND MODES

Based on the signal being received, you can select various surround-sound modes: MONO, SPATIAL, STEREO, INCR. SURROUND, or DOLBY VIRTUAL (Virtual Dolby Surround). (See descriptions of the options to the right.)*

Selecting a Surround-sound Option Using the Remote Control

While watching TV, you can select a surround-sound listening mode immediately by pressing the DOLBY V button. Each press of the DOLBY V button selects a different mode based on the TV signal being received.



Surround-sound Modes

In stereo: select STEREO, INCR. SURROUND, or DOLBY* VIRTUAL.

INCR. (Incredible) SURROUND enhances stereo programs by making the sound broader and fuller.

DOLBY VIRTUAL (with Virtual Dolby Surround signals) creates a virtualized surround-sound experience from two speakers using Dolby Pro Logic.* It retains all the original multichannel audio information and provides the listener with the sensation of being surrounded by additional speakers.

In mono: select MONO or SPATIAL.

SPATIAL enables you to add a surround effect to mono programs.

Selecting a Surround-sound Option Using the TV Buttons

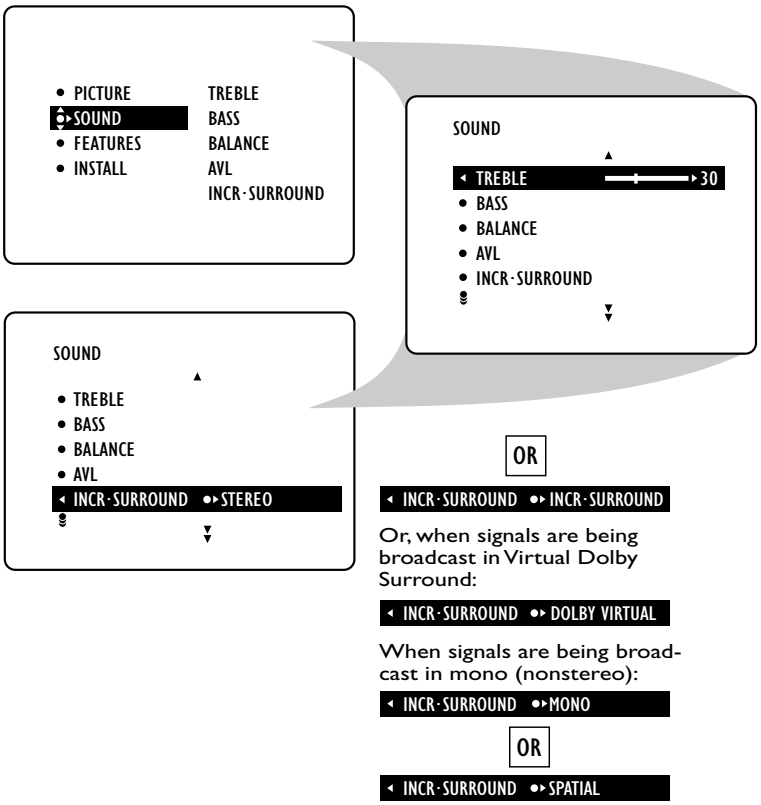
Should your remote control become lost or otherwise unavailable for use, follow the steps below to use the buttons on the front of the TV to access the on-screen menu and select a surround-sound mode.

1 **Press the Volume + and – buttons** at the same time. The on-screen menu appears.

2 **Press the Channel Down button** to highlight SOUND. Then press the Volume + button to enter the SOUND submenu.

3 **Press the Channel Down button** repeatedly until INCR. SURROUND is highlighted. Then press the Volume + or – button until you select the surround-sound mode you want.

4 **Press the Volume + and – buttons** at the same time and repeatedly until you back out of the menu screens.



HELPFUL HINT

The AVL (Audio Volume Leveler) control does not function with the Dolby Virtual feature, so the option disappears from the SOUND submenu when you select DOLBY VIRTUAL.

*Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic", and the double-D symbol are trademarks of Dolby Laboratories.

SELECTING THE STEREO/MONO SOUND MODE

You can enjoy stereo programs on your TV. It has both an amplifier and twin speakers through which stereo sound can be heard. Follow these steps to select the STEREO mode.

1 **Press the MENU/SELECT button** on the remote control to show the on-screen menu.

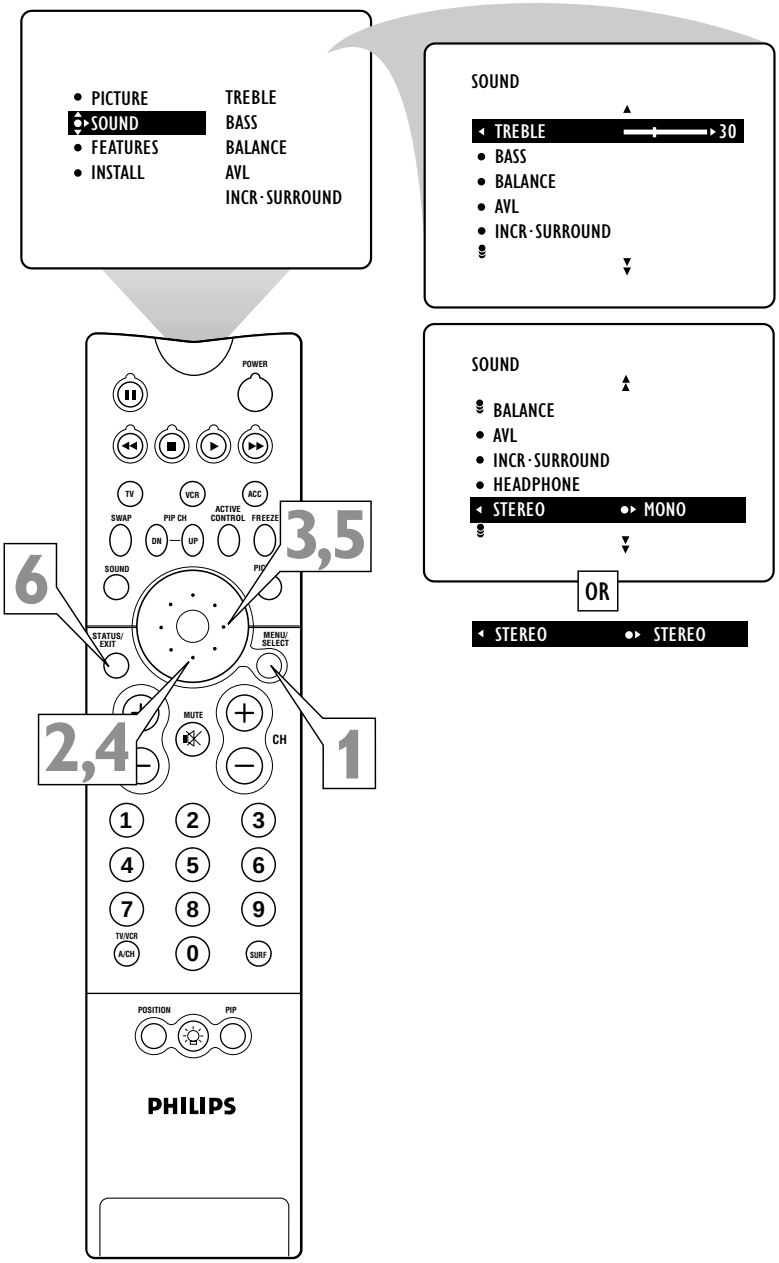
2 **Press the CURSOR RING DOWN** once to highlight SOUND.

3 **Press the CURSOR RING RIGHT** to enter the SOUND submenu.

4 **Press the CURSOR RING DOWN** repeatedly until the STEREO control is highlighted.

5 **Press the CURSOR RING RIGHT or LEFT** to select STEREO or MONO. When STEREO has been selected, the television will reproduce any stereo signal it receives.

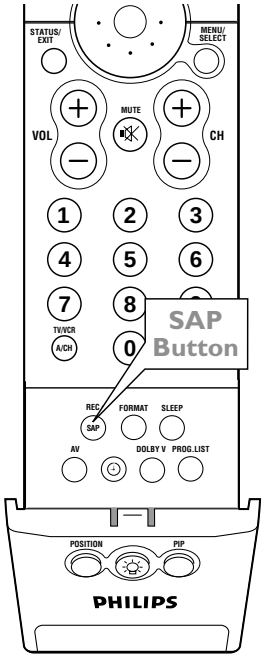
6 **Press the STATUS/EXIT button** to exit the menu.



SELECTING THE SAP (SECOND AUDIO PROGRAM) FEATURE

SAP, or Second Audio Program, is an additional part of the stereo broadcast system. Sent as a third audio channel, an SAP can be heard apart from the current TV program sound. TV stations are free to use SAP for any number of purposes, such as the broadcast of a second language or other audio information.

If an SAP signal is not present with a selected program, the SAP option cannot be selected.



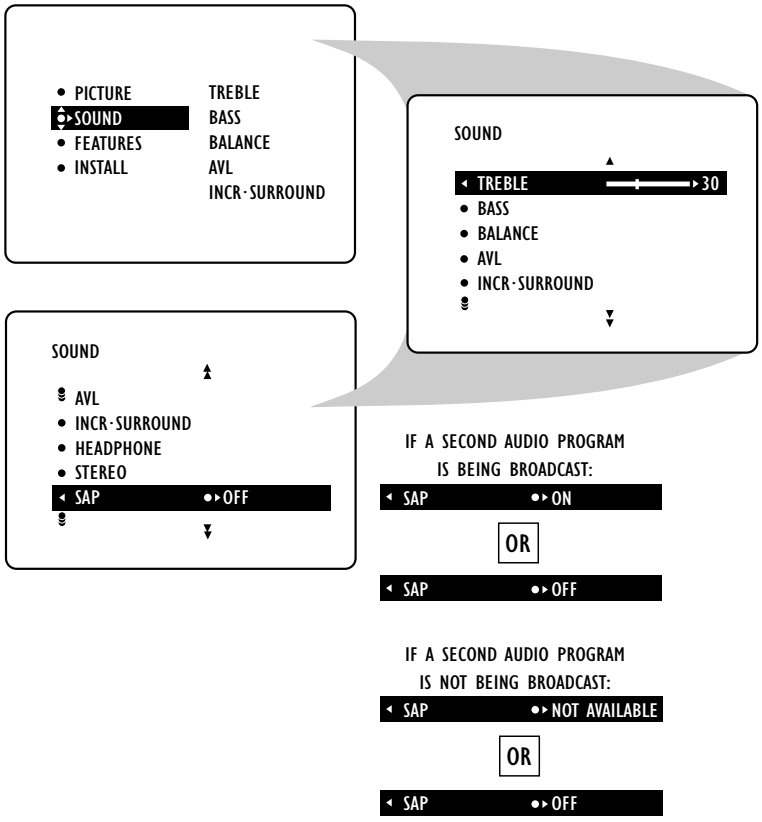
Selecting SAP Using the Remote Control

Select SAP immediately by pressing the SAP button on the remote control if the feature is being made available with the program you are watching.

Selecting SAP Using the TV Buttons

Should your remote control become lost or otherwise unavailable for use, follow the steps below to use the buttons on the front of the TV to access the on-screen menu and select SAP.

***NOTE:** SAP must be broadcast with the program you are watching for you to be able to select the feature.*

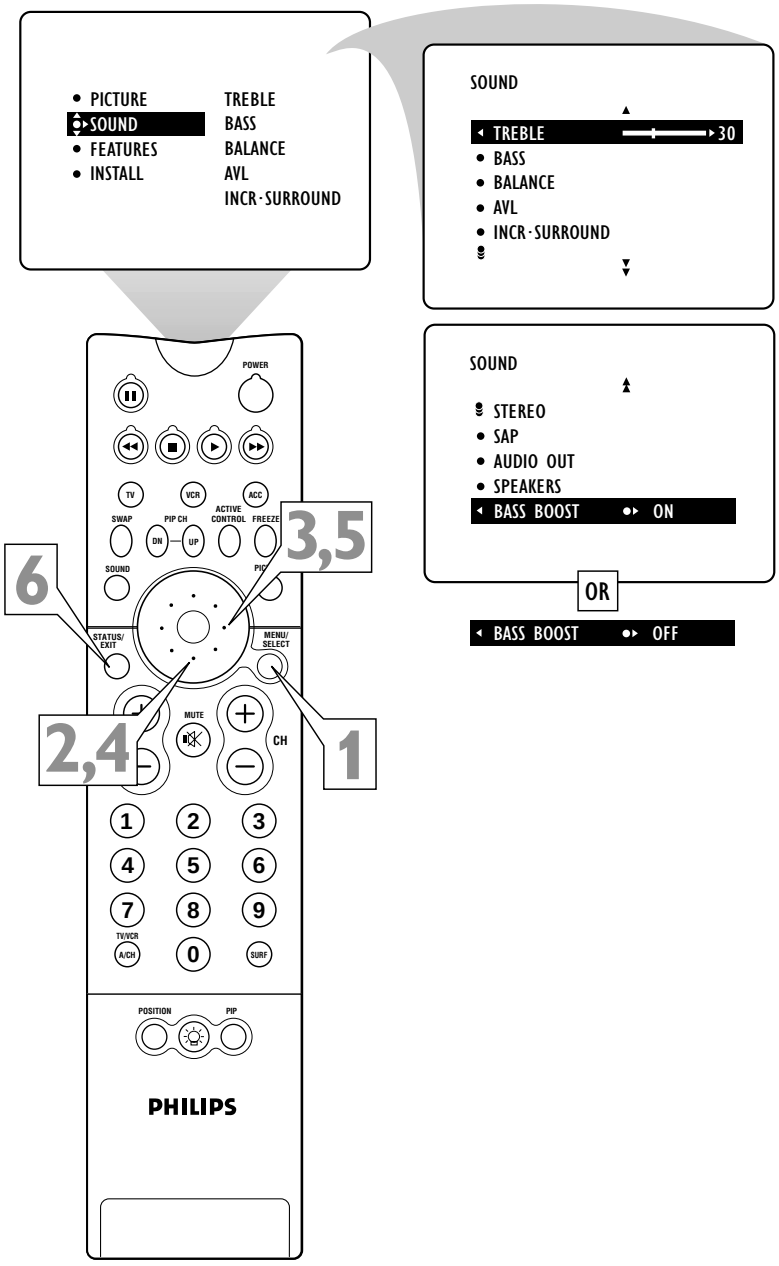


1. **Press the Volume + and – buttons** at the same time. The on-screen menu appears.
2. **Press the Channel Down button** to highlight SOUND. Then press the Volume + button to enter the SOUND submenu.
3. **Press the Channel Down button** repeatedly until SAP is highlighted. Then press the Volume + or – button to turn SAP on or off.
4. **Press the Volume + and – buttons** at the same time and repeatedly until you back out of the menu screens.

USING THE BASS BOOST CONTROL

The BASS BOOST control allows you to increase the low-frequency range of the TV's sound. This creates a deeper, fuller sound. Follow these steps to turn BASS BOOST ON.

1. **Press MENU/SELECT button** on the remote control to show the on-screen menu.
2. **Press the CURSOR RING DOWN** once to highlight SOUND.
3. **Press the CURSOR RING RIGHT** to enter the SOUND submenu.
4. **Press the CURSOR RING DOWN** repeatedly until BASS BOOST is highlighted.
5. **Press the CURSOR RING RIGHT or LEFT** to turn BASS BOOST ON or OFF.
6. **Press the STATUS/EXIT button** to exit the menu.



SETTING THE CLOCK

Your TV comes with an on-screen clock. You will need to set the clock before you can use the Timer feature. During normal operation, the time appears on the screen when you press the STATUS/EXIT button. You can show the time on screen constantly by turning the TIMER DISPLAY control on (see page 40).

For instructions on setting the Timer's START and STOP times, see page 41. Then go to pages 42 and 43 to learn how to select the Timer's channel and activate the Timer.

***NOTE:** You can access the TIME (clock) feature directly by pressing the Clock button on the remote control.*

1 **Press the MENU/SELECT button** on the remote control to show the on-screen menu.

2 **Press the CURSOR RING DOWN** twice to highlight FEATURES.

3 **Press the CURSOR RING RIGHT** to enter the FEATURES submenu.

4 **Press the CURSOR RING RIGHT** again to shift the display left and highlight the TIME control.

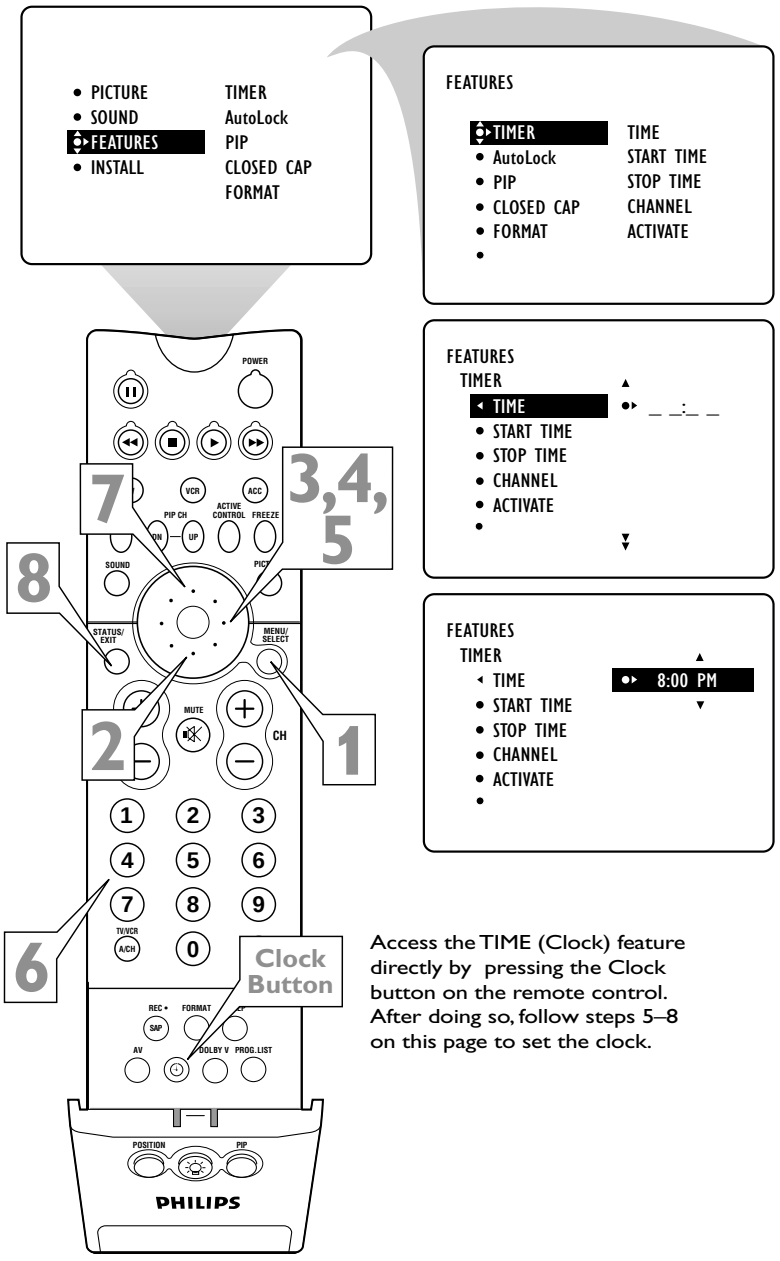
5 **Press the CURSOR RING RIGHT** again to highlight the time indicator area.

6 **Press the NUMBER buttons** to enter the correct time. If you make a mistake entering the time, press the CURSOR RING LEFT or RIGHT to move among the input slots to make corrections.

NOTE: You can also press the CURSOR RING UP or DOWN to cycle through digits to input the time.

7 **Press the CURSOR RING UP or DOWN** to select AM or PM.

8 **Press the STATUS/EXIT button** to exit the menu.



Access the TIME (Clock) feature directly by pressing the Clock button on the remote control. After doing so, follow steps 5–8 on this page to set the clock.

HELPFUL HINTS

- For single-digit entries, be sure to press *0* first and then the hour number.
- If you'd like, set the clock automatically using the AutoChron™ feature (page 5, *Quick Use and Setup Guide*).
- Clock settings may be lost when the TV is unplugged or when AC power to the set is interrupted.

DISPLAYING THE TIME

After you have set the TV's clock, you can use your TV to keep up with the time on screen. You can also set the timer to switch to another channel, and, if you want, turn the TV off. The Timer's DISPLAY control allows you to show the time constantly in the upper right corner of the screen.

1 **Press the MENU/SELECT button** on the remote control to show the on-screen menu.

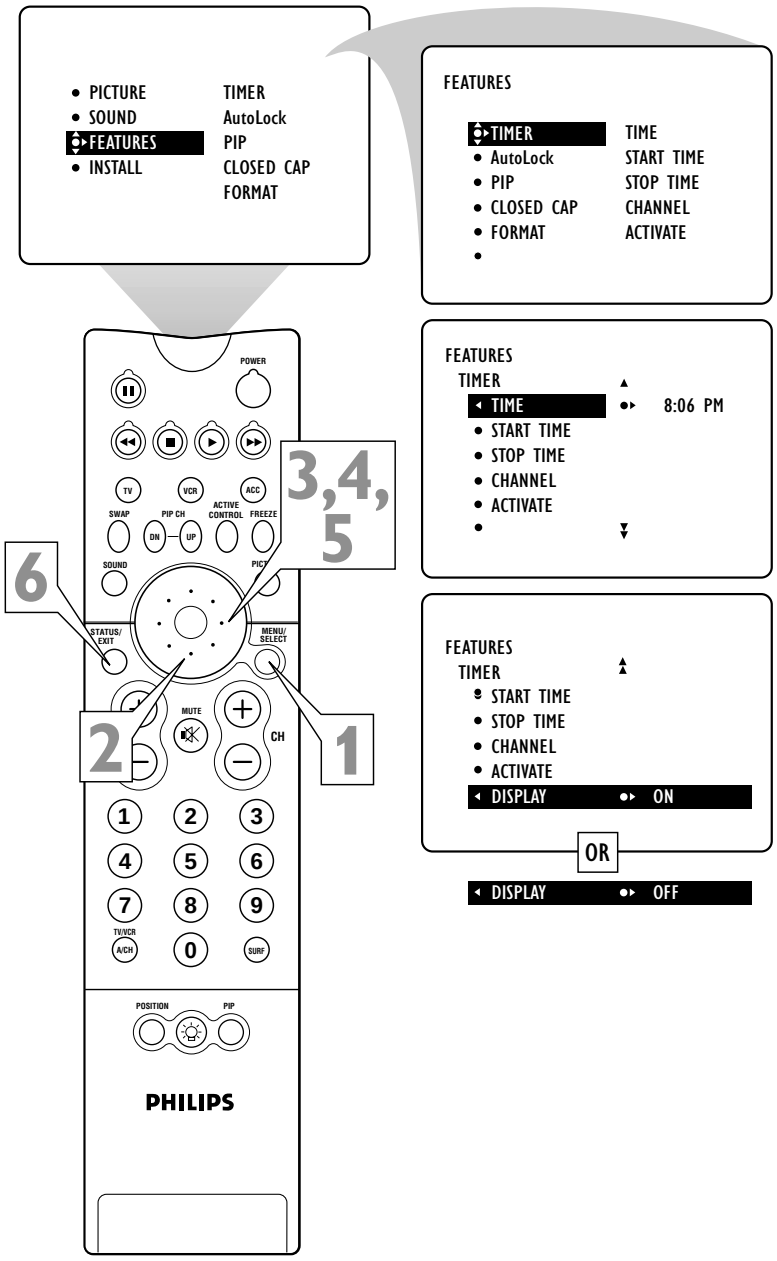
2 **Press the CURSOR RING DOWN** twice to highlight FEATURES.

3 **Press the CURSOR RING RIGHT** to enter the FEATURES submenu.

4 **Press the CURSOR RING RIGHT** again. Then press the CURSOR RING DOWN repeatedly until the DISPLAY control is highlighted.

5 **Press the CURSOR RING RIGHT or LEFT** to turn the TIMER DISPLAY ON or OFF.

6 **Press the STATUS/EXIT button** to exit the menu.



SETTING THE TIMER'S START TIME AND STOP TIME

You can set the Timer to switch to a selected channel at a specific time while you are watching another channel, or when the TV is in standby mode. (Standby mode is when the TV is plugged into the wall outlet but turned off.) If you want, you can also set the TV to turn off at some time after the TV switches channels. Follow the steps below to set the Timer's START TIME and STOP TIME.

1 **Press the MENU/SELECT button** on the remote control to show the on-screen menu.

2 **Press the CURSOR RING DOWN** twice to highlight FEATURES.

3 **Press the CURSOR RING RIGHT** to enter the FEATURES submenu.

4 **Press the CURSOR RING RIGHT** again. Then press the CURSOR RING DOWN once to highlight the START TIME control.

5 **Press the CURSOR RING RIGHT** to highlight the time indicator area.

6 **Press the NUMBER buttons** to enter the correct time. If you make a mistake entering the time, use the CURSOR RING LEFT or RIGHT to move among the time input slots to make corrections.

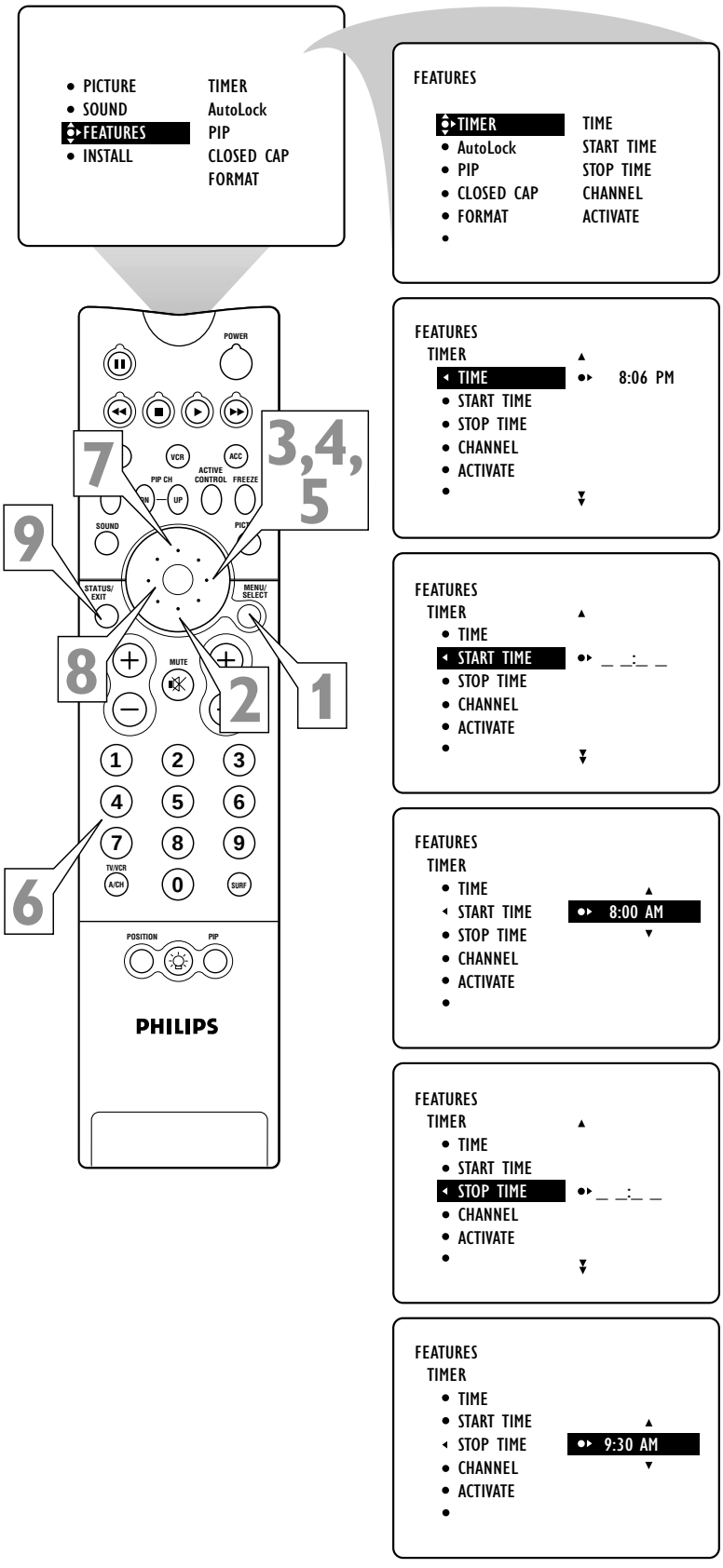
NOTE: You can also use the CURSOR RING UP or DOWN to cycle through digits to input the time.

7 **Press the CURSOR RING UP or DOWN** to select AM or PM.

8 **Press the CURSOR RING LEFT** repeatedly until START TIME is highlighted. Then press the CURSOR RING DOWN to highlight STOP TIME. If you want the TV to switch off at some time after the changing of channels, follow steps 5–7 above to set the STOP TIME.

9 **Press the STATUS/EXIT button** to exit the menu.

See pages 42 and 43 for instructions on selecting the Timer's channel and activating the timer.



SELECTING THE TIMER'S CHANNEL

Follow these steps to select the channel to which the Timer will switch the TV.

1 **Press the MENU/SELECT button** on the remote control to show the on-screen menu.

2 **Press the CURSOR RING DOWN** twice to highlight FEATURES.

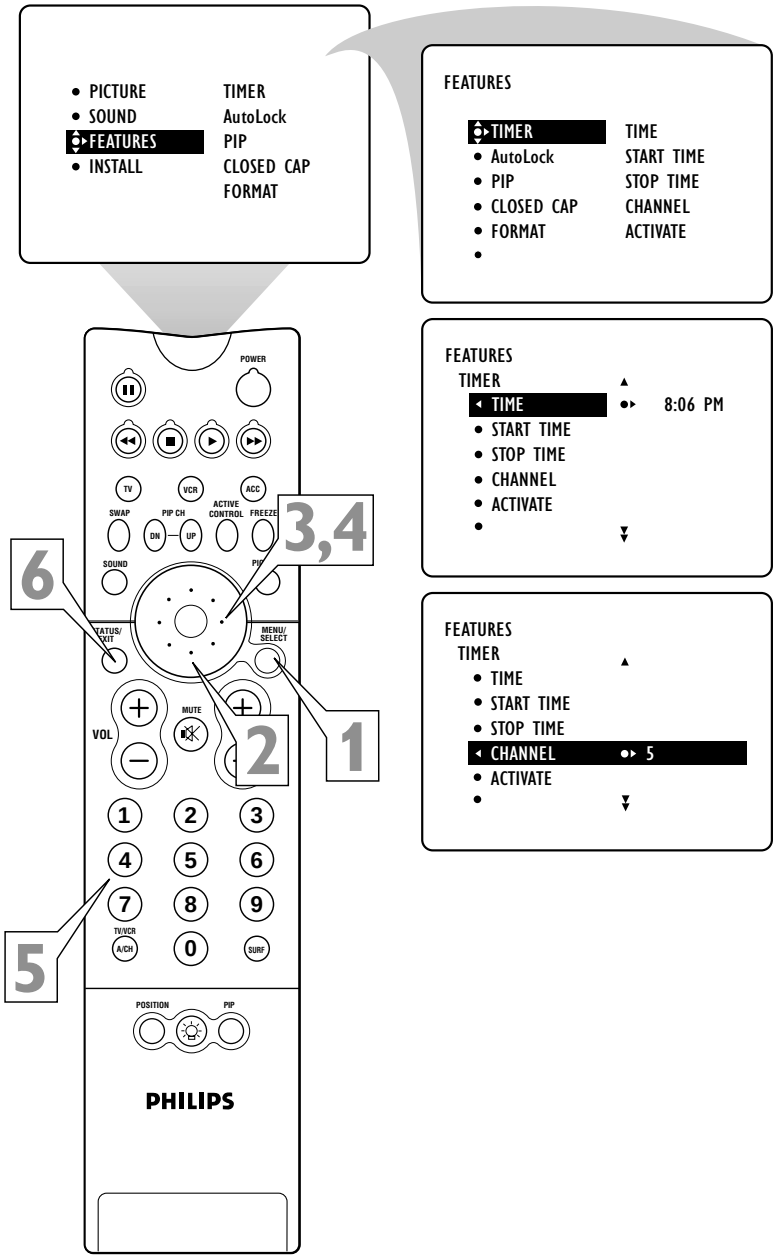
3 **Press the CURSOR RING RIGHT** to enter the FEATURES submenu.

4 **Press the CURSOR RING RIGHT**. Then press the CURSOR RING DOWN repeatedly until the CHANNEL control is highlighted.

5 **Press the NUMBER buttons** to enter the desired start-up channel. Or press the CURSOR RING RIGHT repeatedly to enter the start-up channel you want.

6 **Press the STATUS/EXIT button** to exit the menu.

NOTE: Before the Timer will work, you must activate it. See page 43.



SETTING THE TIMER'S ACTIVATE CONTROL

After you have set the TIME, START TIME, STOP TIME, and CHANNEL, you must activate the Timer for it to operate. Your options are to set the Timer to work ONCE or DAILY. Set ACTIVATE to OFF if you don't want to use the Timer.

1 **Press the MENU/SELECT button** on the remote control to show the on-screen menu.

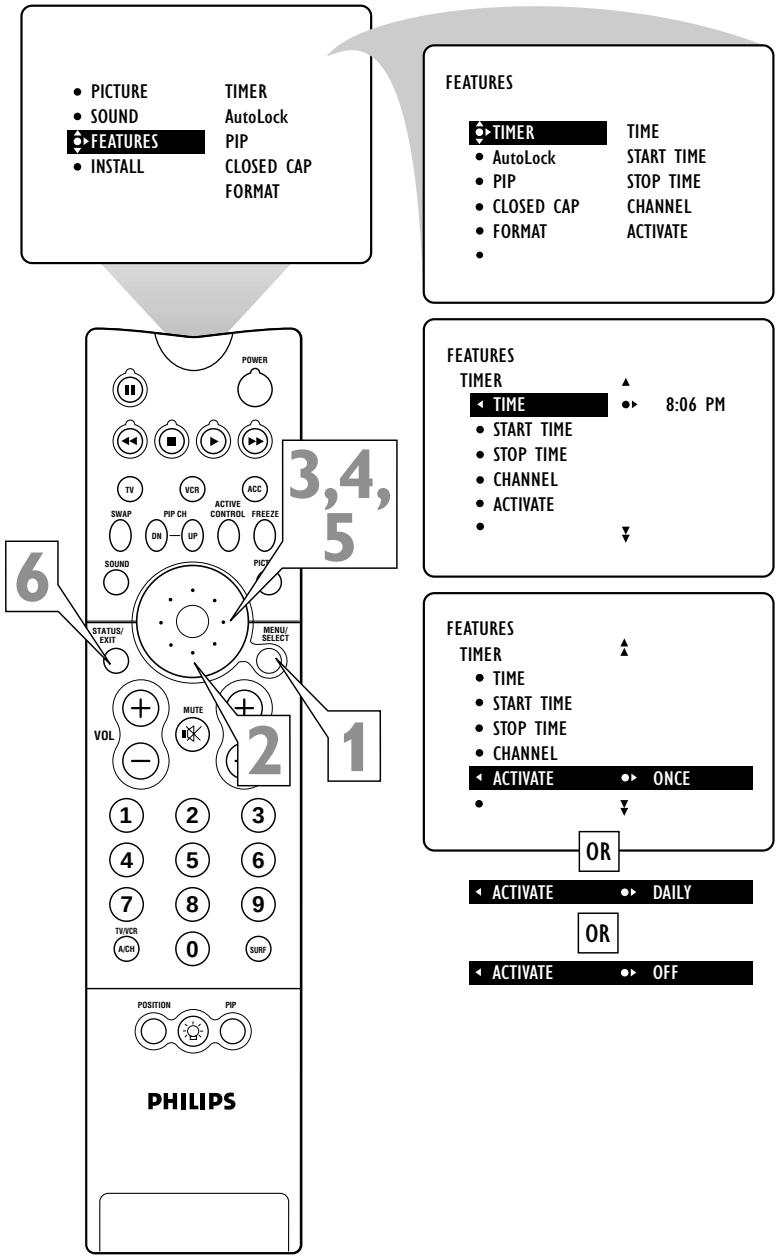
2 **Press the CURSOR RING DOWN** twice to highlight FEATURES.

3 **Press the CURSOR RING RIGHT** to enter the FEATURES submenu.

4 **Press the CURSOR RING RIGHT** again. Then press the CURSOR RING DOWN repeatedly until the ACTIVATE control is highlighted.

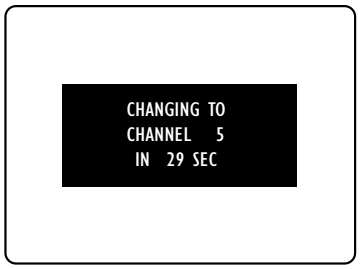
5 **Press the CURSOR RING RIGHT** to cycle through the options and make your selection. The options are ONCE, DAILY, or OFF.

6 **Press the STATUS/EXIT button** to exit the menu.



HELPFUL HINTS

- Changing the channel or adjusting the volume during the last minute of a Timer setting will cancel the shutting off of the TV.
- Thirty seconds before the TV changes to the channel you set (see page 42), an announcement appears on screen.



UNDERSTANDING AUTOLOCK™

The AutoLock™ feature can help parents control what their children watch on TV. AutoLock™ does this by using the content advisories sent by broadcasters or other program providers. After you program AutoLock™, it can respond to the content advisories and block programs that contain content that you may consider objectionable—offensive language, violence, or sexual situations. You can also use AutoLock™ to block channels that you don't want your children to watch.

In this section, you'll learn how to block channels and programming that is not rated, is unrated, or has no rating. You will also find out how to turn these blocking features on or off. Following on this page are brief explanations of AutoLock™ terms and program ratings.

Terms

BLOCKING control—can be thought of as the "master switch" for AutoLock™. This control affects the settings you have chosen for blocking programs according to movie ratings or TV ratings, or for blocking programs that have no rating or are unrated. When the BLOCKING control is OFF, the blocking or censoring of programs is disabled. When the BLOCKING control is ON, blocking will occur according to the settings you have chosen.

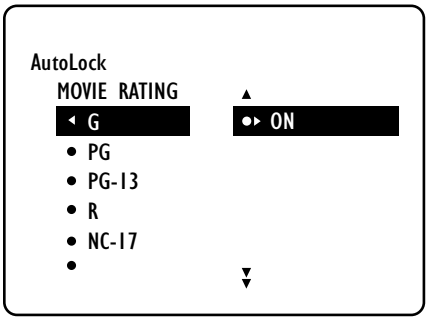
BLOCK UNRATED control—if set to ON, blocks all unrated programs.

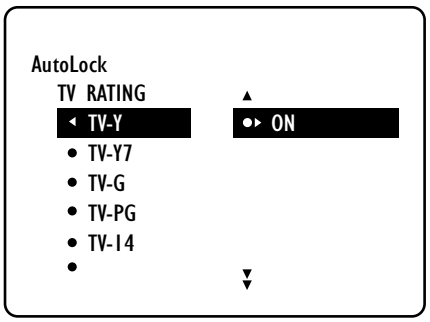
Unrated programming consists of the kind of shows that the MPAA (Motion Picture Association of America) or the TV broadcasters have chosen not to rate.

NO RATING control—if set to ON, blocks all programming with no content advisory data.

Programming that has No Rating is not encoded with any rating information from the MPAA or the Parental Guidelines. Any programming could fall into this category.

BLOCK CHANNEL control—enables you to block individual channels that you don't want children to see.





MOVIE RATINGS
(MOTION PICTURE ASSOCIATION OF AMERICA)

G (General Audience)—all ages admitted. Most parents will find programs that are rated G to be suitable for children of all ages. Such programs have little or no violence, no strong language, and little or no sexual dialog or sexual situations.

PG (Parental Guidance Suggested)—contains material that parents may find unsuitable for younger children. Programs that are rated PG have one or more of the following: moderate violence, some sexual situations, infrequent coarse language, or some suggestive dialog.

PG-13 (Parents Strongly Cautioned)—contains material that parents may find unsuitable for children under the age of 13. Programs that are rated PG-13 have one or more of the following: violence, sexual situations, coarse language, or suggestive dialog.

R (Restricted)—specifically designed for adults. Anyone under the age of 17 should view programs that are rated R only with an accompanying parent or adult guardian. Such programs have one or more of the following: intense violence; intense sexual situations; strong, coarse language; or intensely suggestive dialogue.

NC-17 (No one under the age of 17 will be admitted)—should be viewed by adults only. Programs that are rated NC-17 have graphic violence; explicit sex; or crude, indecent language.

X (Adults Only)—contains one or more of the following: very graphic violence, very graphic and explicit or indecent sexual acts, or very coarse and intensely suggestive language.

TV PARENTAL GUIDELINES
(TV BROADCASTERS)

TV-Y (**All Children)**—designed to be appropriate for all children, especially ones ages 2–6. Programs rated TV-Y are not expected to frighten younger children.

TV-Y7 (**Directed to Older Children)**—designed for children ages 7 and older. Programs rated TV-Y7 may be more appropriate for children who have acquired the development skills needed to distinguish between make-believe and reality. Such programs may include mild fantasy and comic violence (designated "FV" for Fantasy Violence).

TV-G (**General Audience**)—most parents will consider programs that are rated TV-G to be suitable for children of all ages. Such programs have little or no violence, no strong language, and little or no sexual dialogue or sexual situations.

TV-PG (**Parental Guidance Suggested)**—contains material that parents may find unsuitable for younger children. This type of programming has one or more of the following: moderate violence (V), some sexual situations (S), infrequent coarse language (L), or some suggestive dialogue (D).

TV-14 (**Parents Strongly Cautioned**—contains material that many parents will find unsuitable for children under 14 years of age. Such programs have one or more of the following: intense violence (V); intense sexual situations (S); strong, coarse language (L); or intensely suggestive dialogue (D).

TV-MA (**Mature Audience Only)**—specifically designed to be viewed by adults and therefore may be unsuitable for children under 17. Such programs have one or more of the following: graphic violence (V); explicit sexual situations (S); or crude, indecent language (L).

SETTING UP THE AUTOLOCK™ ACCESS CODE

Your AutoLock™ access code allows you to enter the AutoLock™ submenus to set up or turn off blocking. Your access code is also the "key" that unlocks programs or channels that are being blocked by AutoLock™.

1 **Press the MENU/SELECT button** on the remote control to show the on-screen menu.

2 **Press the CURSOR RING DOWN** twice to highlight FEATURES.

3 **Press the CURSOR RING RIGHT**. Then press the CURSOR RING DOWN once to highlight the AutoLock control.

4 **Press the CURSOR RING RIGHT** to highlight ACCESS CODE.

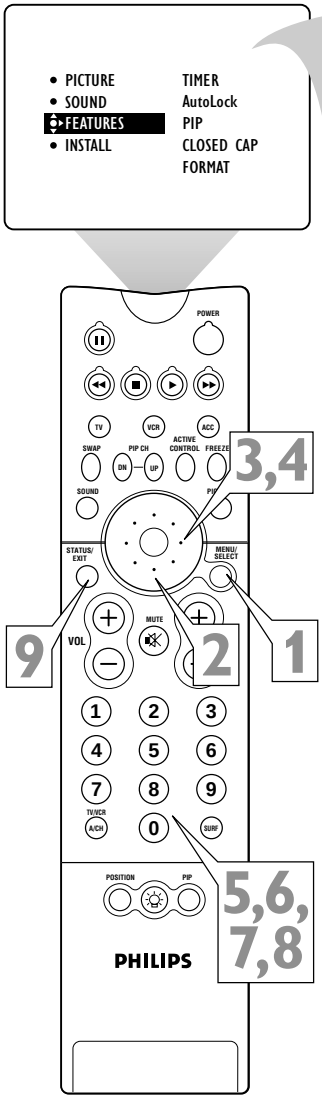
5 **Press 0,7,1,1** on the remote control. INCORRECT will appear on the screen.

6 **Press 0,7,1,1** on the remote control again. ENTER NEW CODE will appear on the screen.

7 **Enter a new four-digit code** using the number buttons. CONFIRM CODE will appear on the screen.

8 **Enter your new four-digit code** again. CORRECT will flash on the screen briefly.

9 **Press the STATUS/EXIT button** exit the menu.



FEATURES
• TIMER — TIME
• AutoLock — START TIME
• PIP — STOP TIME
• CLOSED CAP — CHANNEL
• FORMAT — ACTIVATE

FEATURES
• TIMER — ACCESS CODE - - - -
• AutoLock
• PIP
• CLOSED CAP
• FORMAT

FEATURES
• TIMER
• AutoLock — ACCESS CODE - - - -
• PIP
• CLOSED CAP
• FORMAT

FEATURES
• TIMER
• AutoLock — ACCESS CODE X X X X
• PIP
• CLOSED CAP
• FORMAT

FEATURES
• TIMER
• AutoLock — ACCESS CODE X X X X INCORRECT
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FEATURES
• TIMER
• AutoLock — ENTER NEW CODE X X X X
• PIP
• CLOSED CAP
• FORMAT

FEATURES
• TIMER
• AutoLock — CONFIRM CODE - - - -
• PIP
• CLOSED CAP
• FORMAT

FEATURES
• TIMER
• AutoLock — CONFIRM CODE X X X X
• PIP
• CLOSED CAP
• FORMAT

FEATURES
• TIMER
• AutoLock — CONFIRM CODE X X X X CORRECT
• PIP
• CLOSED CAP
• FORMAT

FEATURES
AutoLock
• BLOCK CHANNEL
◂ SETUP CODE — ENTER / ▸ NEW CODE X X X X
• MOVIE RATING
• TV RATING
• BLOCK OPTIONS

FEATURES
AutoLock
• BLOCK CHANNEL
◂ SETUP CODE — CONFIRM / ▸ CODE X X X X / CORRECT
• MOVIE RATING
• TV RATING
• BLOCK OPTIONS

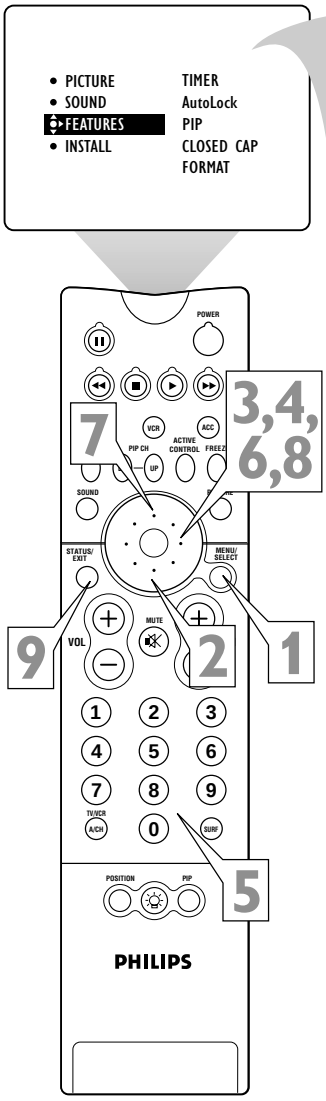
You can also set up a new access code from the main AutoLock™ Submenu using the SETUP CODE option. Simply enter and confirm the new Code to activate it.

HELPFUL HINTS

- An X appears on screen to confirm the receipt of each digit by the TV as you input your AutoLock™ access code.
- Parents, it isn't possible for your child to unblock a channel without knowing your access code or changing it to a new one. If you discover that your access code has been changed, you can assume that blocked channels may have been viewed.

USING AUTOLOCK™ TO BLOCK CHANNELS

After you have set up your personal access code (see page 45), you are ready to select the channels or program sources you want to block.



1 **Press the MENU/SELECT button** on the remote control to show the on-screen menu.

2 **Press the CURSOR RING DOWN** twice to highlight FEATURES.

3 **Press the CURSOR RING RIGHT.** Then press the CURSOR RING DOWN once to highlight the AutoLock control.

4 **Press the CURSOR RING RIGHT** again to highlight ACCESS CODE.

5 **Enter your four-digit ACCESS CODE.** CORRECT will flash very briefly and the submenu will move to the left with BLOCK CHANNEL highlighted.

6 **Press the CURSOR RING RIGHT** to highlight the TV's available channels.

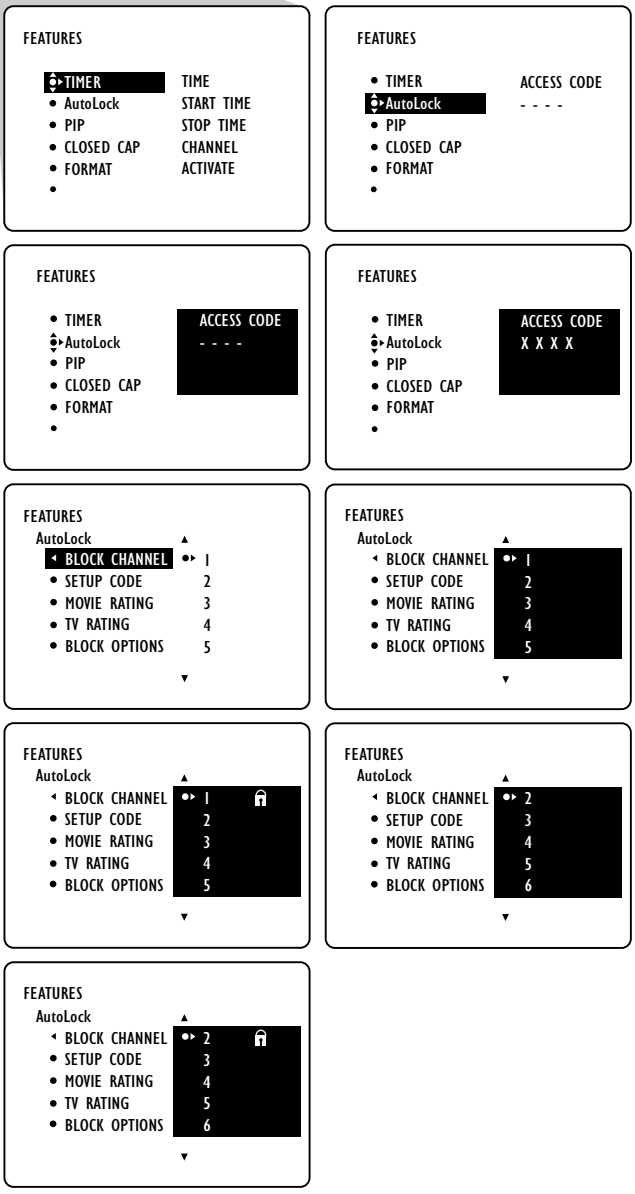
7 **Press the CURSOR RING UP or DOWN** to highlight the channel you want to block.

8 **Press the CURSOR RING RIGHT** to block the channel. A padlock image will appear to the right of the channel number. If you decide you don't want to block the channel, press the CURSOR RING RIGHT again to remove the block. (The padlock image goes away.)

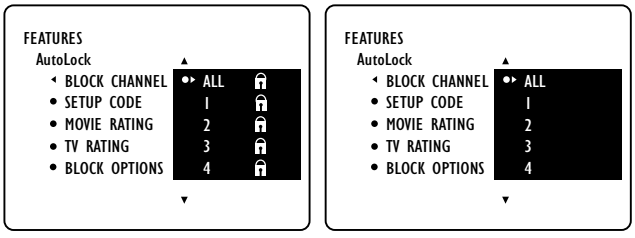
Repeat steps 7 and 8 for any channels you want to block from viewing.

NOTE: You can highlight the ALL option, then press the CURSOR RING RIGHT to block all channels at once. Or press the CURSOR RING RIGHT to unlock all channels.

9 **Press the STATUS/EXIT button** to exit the menu.



To block all channels at once, highlight ALL in the channel list. Then press the CURSOR RING RIGHT to block. Remove the blocks the same way.



HELPFUL HINT

You can use the BLOCK CHANNEL control to prevent the viewing of programs coming from a VCR, DVD, or other accessory device connected to any of the audio/video (AV) inputs on the TV.

USING AUTOLOCK™ TO BLOCK BY MOVIE RATING

After you have set your personal access code (see page 45), you can block programs by specific movie ratings.

1 **Press the MENU/SELECT button** on the remote control to show the on-screen menu.

2 **Press the CURSOR RING DOWN** twice to highlight FEATURES.

3 **Press the CURSOR RING RIGHT**. Then press the CURSOR RING DOWN once to highlight the AutoLock control.

4 **Press the CURSOR RING RIGHT again** to highlight ACCESS CODE**.**

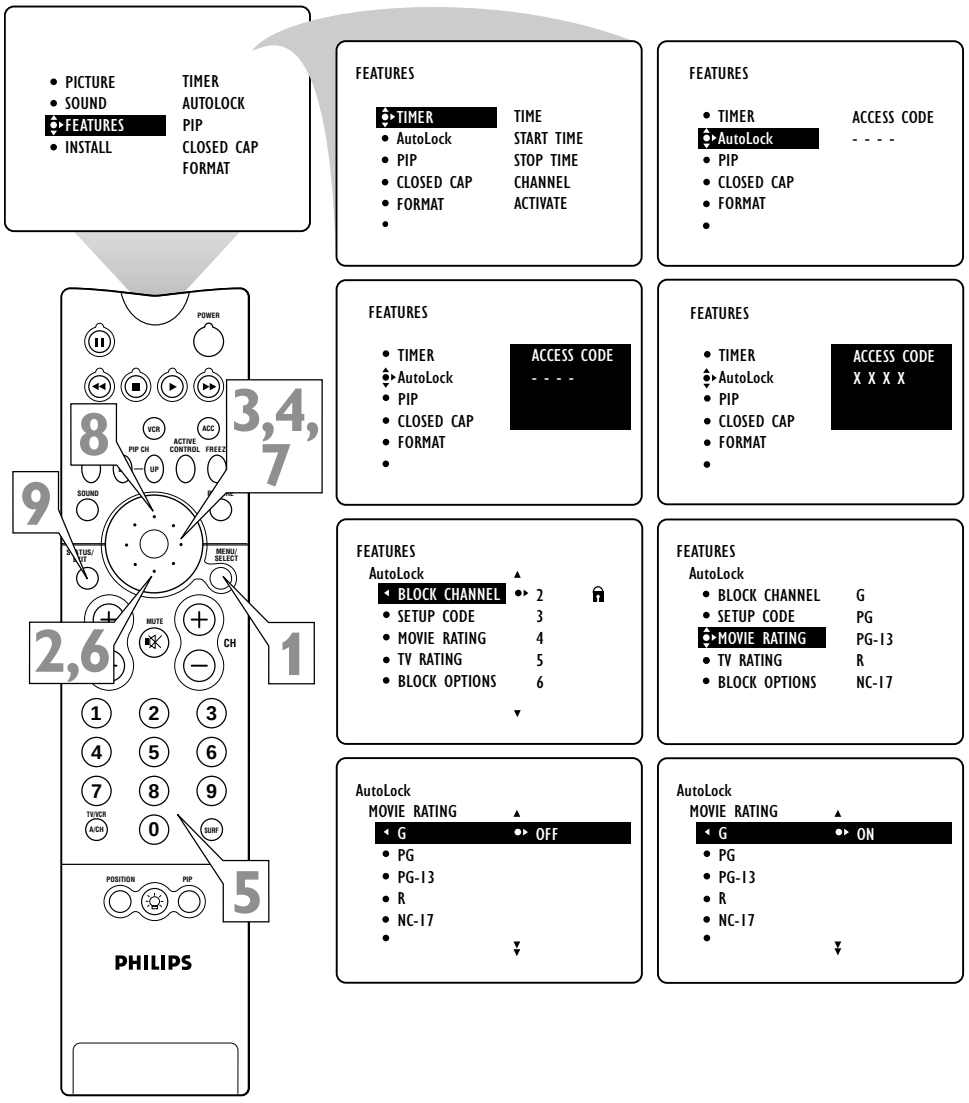
5 **Enter your four-digit ACCESS CODE.** CORRECT will flash very briefly in red and the submenu will move to the left with BLOCK CHANNEL highlighted.

6 **Press the CURSOR RING DOWN** repeatedly until MOVIE RATING is highlighted.

7 **Press the CURSOR RING RIGHT** and the Rating submenu will shift to the left with G highlighted.

8 **Press the CURSOR RING UP or DOWN** to highlight each rating you want. Then press the CURSOR RING RIGHT to turn the rating ON or OFF. Turning the rating ON will block such programs from being seen.

9 **Press the STATUS/EXIT button** to exit the menu.



HELPFUL HINT

When a rating is set to be turned on (blocked), all higher ratings will also be blocked automatically. For example, if the R rating is turned on, the NC-17 and X ratings also will be turned on.

USING AUTOLOCK™ TO BLOCK BY TV RATING

You also can block programs by specific TV ratings. Follow these simple steps.

1 **Press the MENU/SELECT button** on the remote control to show the on-screen menu.

2 **Press the CURSOR RING DOWN** twice to highlight FEATURES.

3 **Press the CURSOR RING RIGHT**. Then press the CURSOR RING DOWN once to highlight the AutoLock control.

4 **Press the CURSOR RING RIGHT** again to highlight ACCESS CODE.

5 **Enter your four-digit ACCESS CODE**.

6 **Press the CURSOR RING DOWN** repeatedly until TV RATING is highlighted.

7 **Press the CURSOR RING RIGHT** to enter the TV RATING submenu.

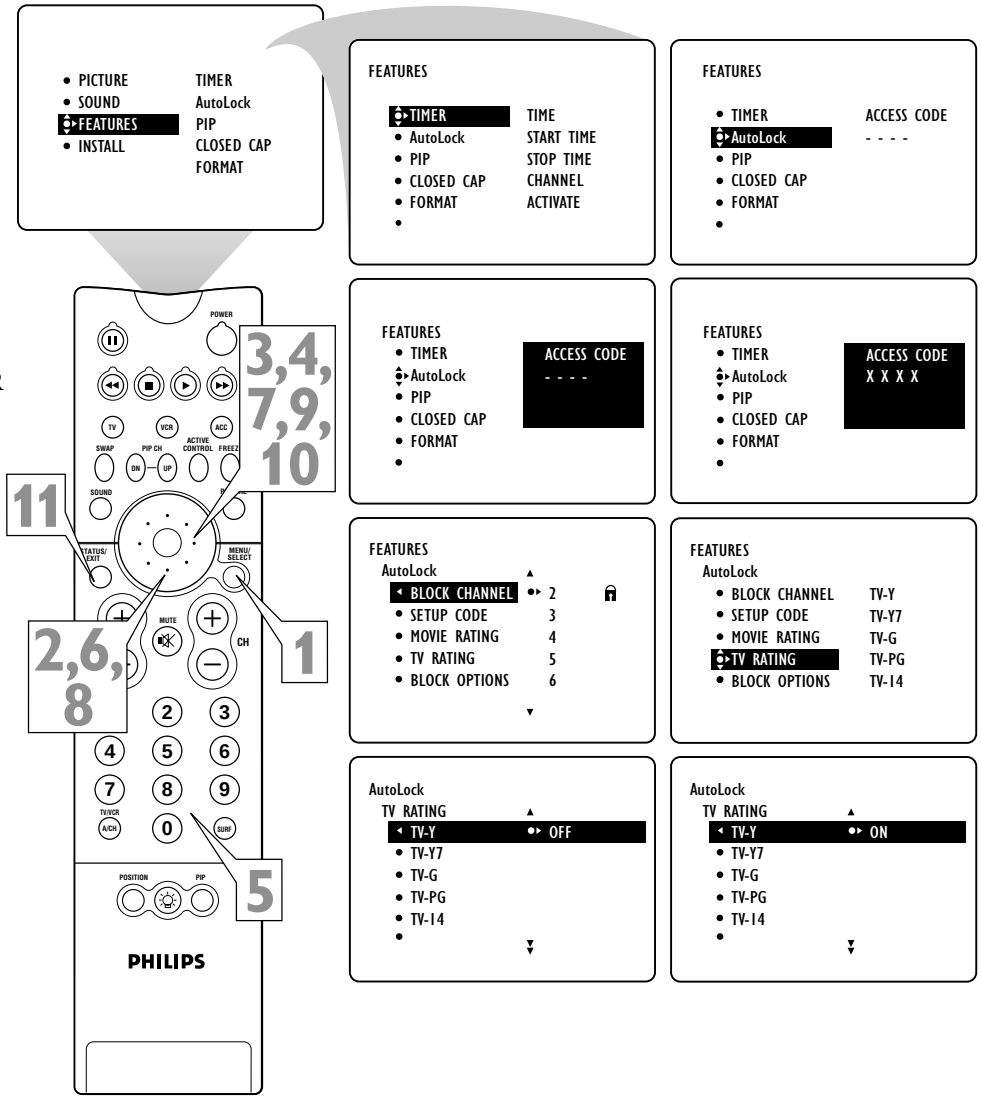
8 **Press the CURSOR RING DOWN or UP** to select a rating.

9 **Press the CURSOR RING RIGHT or LEFT** to turn the block on the rating ON or OFF.

NOTE: More-specific subratings (for violence, sexual content, dialogue, or fantasy violence) are available for TV-Y7, TV-PG, TV-14, and TV-MA.

10 **To access these subratings, press the CURSOR RING RIGHT.** Press the CURSOR RING UP or DOWN to select the subrating that you want to block or unblock. Then press the CURSOR RING RIGHT or LEFT button to turn the block on the subrating ON or OFF.

11 **Press the STATUS/EXIT button** to exit the menu.



TV-Y (**All Children)**—designed to be appropriate for all children, especially ones ages 2–6. Programs rated TV-Y are not expected to frighten younger children.

TV-Y7 (**Directed to Older Children)**—designed for children ages 7 and older. Programs rated TV-Y7 may be more appropriate for children who have acquired the development skills needed to distinguish between make-believe and reality. Such programs may include mild fantasy and comic violence (FV).

TV-G (**General Audience**)—likely to be considered suitable for children of all ages. Such programs have little or no violence, no strong language, and little or no sexual dialogue or sexual situations.

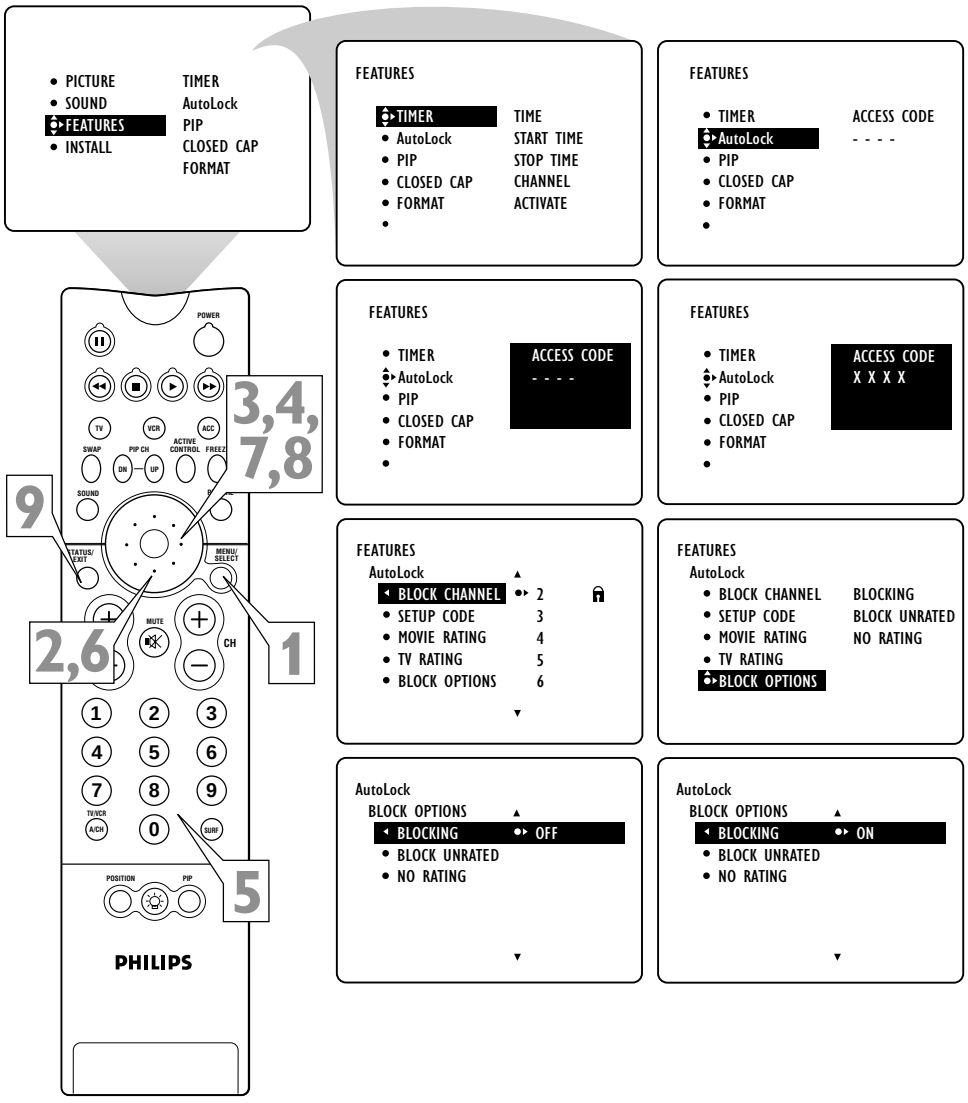
TV-PG (**Parental Guidance Suggested)**—contains material that parents may find unsuitable for younger children. This type of programming has one or more of the following: moderate violence (V), some sexual situations (S), infrequent coarse language (L), or some suggestive dialogue (D).

TV-14 (**Parents Strongly Cautioned)**—contains material that many parents will find unsuitable for children under 14 years of age. Such programs have one or more of the following: intense violence (V); intense sexual situations (S); strong, coarse language (L); or intensely suggestive dialogue (D).

TV-MA (**Mature Audience Only)**—specifically designed to be viewed by adults and therefore may be unsuitable for children under 17. Such programs have one or more of the following: graphic violence (V); explicit sexual situations (S); or crude, indecent language (L).

TURNING THE AUTOLOCK™ BLOCKING CONTROL ON OR OFF

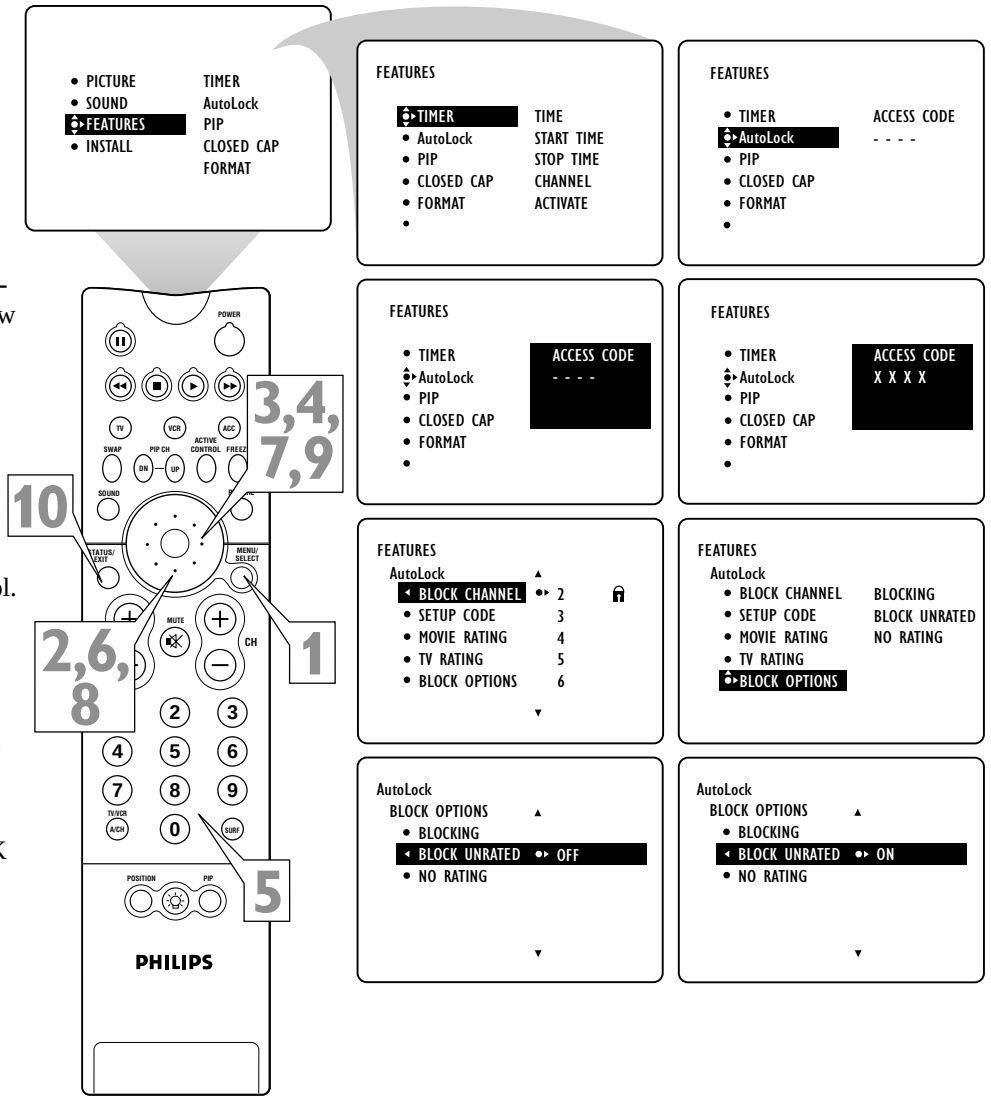
The BLOCKING control can be thought of as the "master switch" for AutoLock™. Use it to turn ON or OFF all of the settings (based on ratings). This control does not affect channel blocks (see page 46).



1. **Press the MENU/SELECT button** on the remote control to show the on-screen menu.
2. **Press the CURSOR RING DOWN** twice to highlight FEATURES.
3. **Press the CURSOR RING RIGHT**. Then press the CURSOR RING DOWN once to highlight the AutoLock control.
4. **Press the CURSOR RING RIGHT** again to highlight ACCESS CODE.
5. **Enter your four-digit ACCESS CODE**.
6. **Press the CURSOR RING DOWN** repeatedly until BLOCK OPTIONS is highlighted.
7. **Press the CURSOR RING RIGHT** to enter the BLOCK OPTIONS submenu. BLOCKING will be highlighted.
8. **Press the CURSOR RING RIGHT or LEFT** to turn BLOCKING ON or OFF.
9. **Press the STATUS/EXIT button** to exit the menu.

USING AUTOLOCK™ TO BLOCK UNRATED BROADCASTS

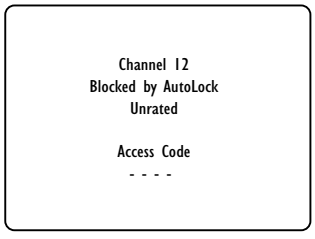
In addition to blocking rated programs or channels, you may also choose to block all programming that is unrated. Unrated programming consists of shows that the MPAA (Motion Picture Association of America) or the TV broadcasters have chosen not to rate.



1. **Press the MENU/SELECT button** on the remote control to show the on-screen menu.
2. **Press the CURSOR RING DOWN** twice to highlight FEATURES.
3. **Press the CURSOR RING RIGHT**. Then press the CURSOR RING DOWN once to highlight the AutoLock control.
4. **Press the CURSOR RING RIGHT** again to highlight ACCESS CODE.
5. **Enter your four-digit ACCESS CODE**.
6. **Press the CURSOR RING DOWN** repeatedly until BLOCK OPTIONS is highlighted.
7. **Press the CURSOR RING RIGHT** to enter the BLOCK OPTIONS submenu.
8. **Press the CURSOR RING DOWN** once to select BLOCK UNRATED.
9. **Press the CURSOR RING RIGHT or LEFT** to turn BLOCK UNRATED ON or OFF.
10. **Press the STATUS/EXIT button** to exit the menu.

HELPFUL HINT

When the BLOCK UNRATED control is turned ON, attempts to view unrated programs will bring to the screen a message like the one shown to the right. To watch the program, enter your access code or go into the BLOCK OPTIONS submenu and turn the BLOCK UNRATED control OFF.



USING AUTOLOCK™ TO BLOCK BROADCASTS THAT HAVE NO RATING

Some programs contain no content advisories from the Motion Picture Association of America or the television broadcasters (see page 44). To block programs with no rating, follow these steps.

1 **Press the MENU/SELECT button** on the remote control to show the on-screen menu.

2 **Press the CURSOR RING DOWN** twice to highlight FEATURES.

3 **Press the CURSOR RING RIGHT**. Then press the CURSOR RING DOWN once to highlight the AutoLock control.

4 **Press the CURSOR RING RIGHT** again to highlight the ACCESS CODE input area.

5 **Enter your four-digit ACCESS CODE**.

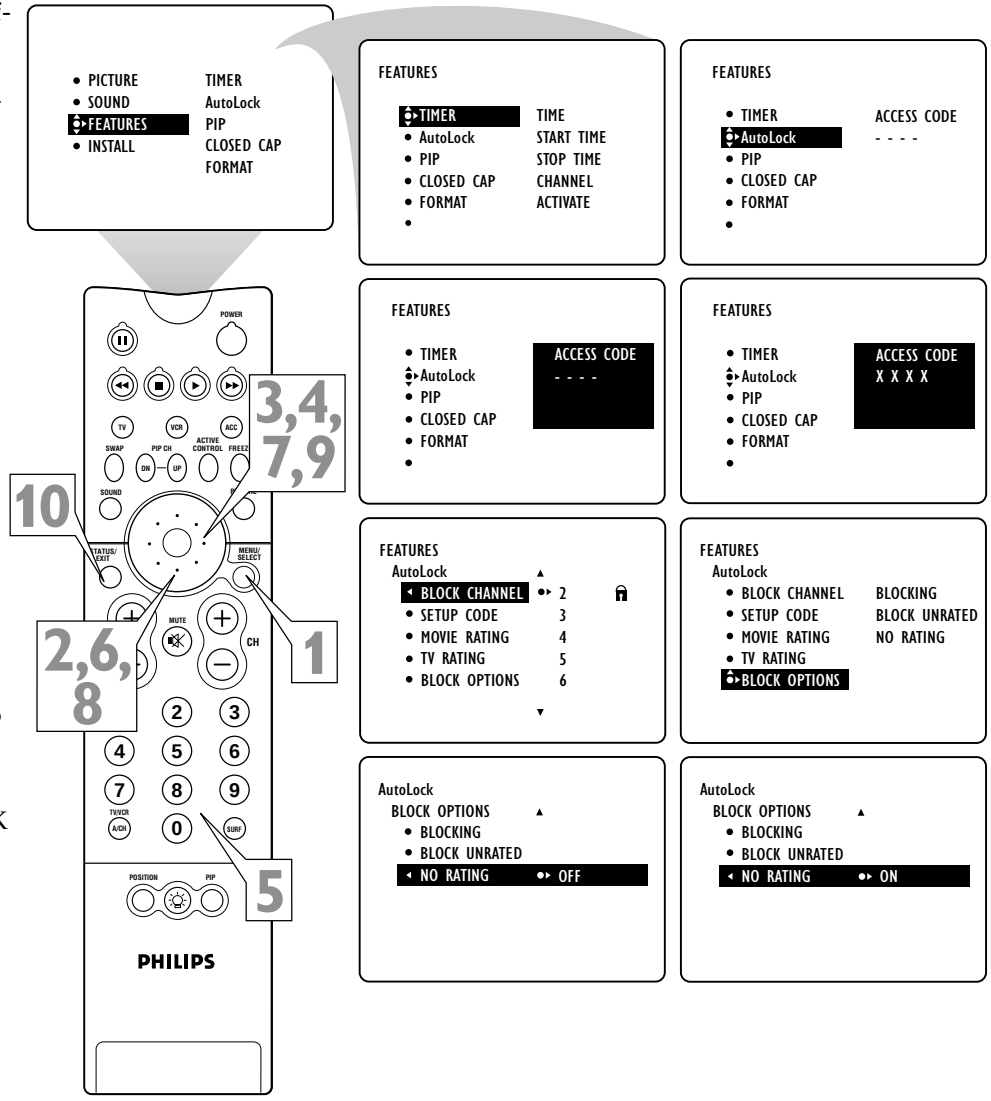
6 **Press the CURSOR RING DOWN** repeatedly until BLOCK OPTIONS is highlighted.

7 **Press the CURSOR RING RIGHT** to enter the BLOCK OPTIONS submenu.

8 **Press the CURSOR RING DOWN** twice to highlight NO RATING.

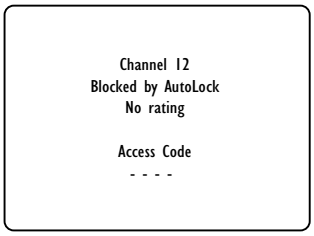
9 **Press the CURSOR RING RIGHT or LEFT** to turn NO RATING ON or OFF.

10 **Press the STATUS/EXIT button** to exit the menu.



HELPFUL HINT

If the NO RATING control is turned on, all programs having no content advisory information will activate a screen like the one shown to the right. To watch the channel, enter your access code or turn the NO RATING option OFF.



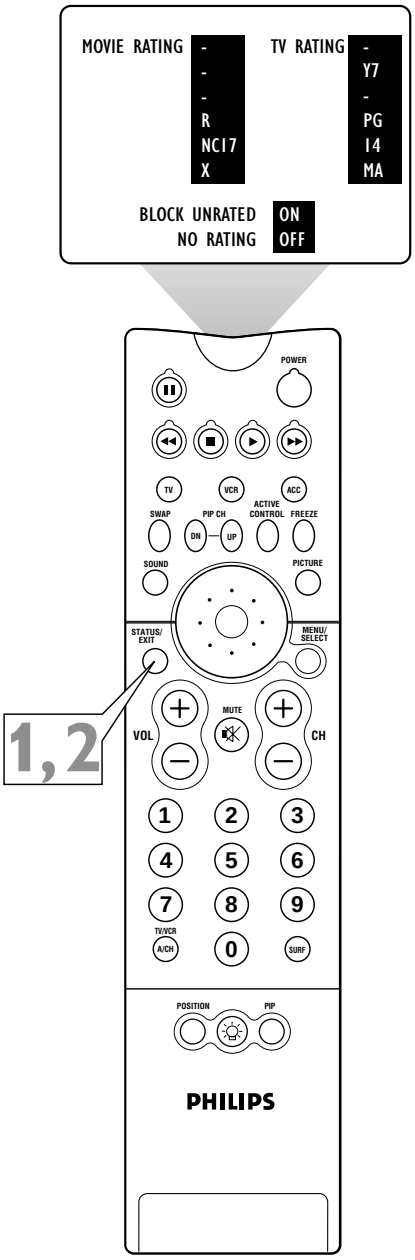
REVIEWING YOUR CURRENT AUTOLOCK™ SETTINGS

AutoLock™ provides a screen that shows the settings you have selected. Here's how to access the screen.

1 **Press the STATUS/EXIT button** on the remote control twice. Your AutoLock™ settings will appear on the screen.

NOTE: If you have blocked specific subratings, such as *V* for Violence in the TV-PG category, these blocked subratings will not appear in the review. Nonetheless, the subratings are still blocked according to your selections.

2 **After a few seconds, the settings will leave the screen automatically,** or you can press the STATUS/EXIT button to exit the menu.



HELPFUL HINT

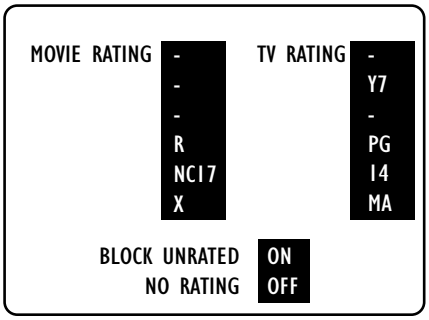
The AutoLock™ review screen will appear only if you have turned ON the BLOCKING control (see page 49).

MOVIE RATING—shows all the movie ratings that you have chosen to block within the MOVIE RATING control. **NOTE:** If a lower rating is blocked, higher ratings will also be blocked automatically. For example, if you block R-rated programs, those that are rated X will also be blocked.

TV RATING—shows all the TV ratings that you have chosen to block within the TV RATING control. **NOTE:** If a lower rating is blocked, higher ratings will also be blocked automatically. For example, if you block TV-PG-rated programs, those rated TV-14 and TV-MA will also be blocked. The TV rating controls also have subratings for Violence (V), Fantasy Violence (FV), Sexual Situations (S), Coarse Language (L), and Suggestive Language (D). If you turn off a main rating but turn on a subrating of that main rating control, programs having the subrating will be blocked; however, the main rating will not appear within the AutoLock review submenu because you did not turn it ON.

BLOCK UNRATED—shows whether you have turned this control ON or OFF.

BLOCK NO RATING—shows whether you have turned this control ON or OFF.



USING THE CLOSED CAPTIONING CONTROL

Closed Captioning (CC) allows you to read the voice content of television programs on the TV screen. Designed to help the hearing impaired, this feature uses on-screen text boxes to show dialogue and conversations while the TV program is in progress.

1 **Press the MENU/SELECT button** on the remote control to show the on-screen menu.

2 **Press the CURSOR RING DOWN** twice to highlight FEATURES.

3 **Press the CURSOR RING RIGHT** to enter the FEATURES submenu.

4 **Press the CURSOR RING DOWN** repeatedly until the CLOSED CAP control is highlighted.

5 **Press the CURSOR RING RIGHT**. The submenu will shift to the left and CAPTION MODE will be highlighted. Then press the CURSOR RING RIGHT again to highlight the CAPTION MODE area.

6 **Press the CURSOR RING UP or DOWN** to select a CAPTION MODE.

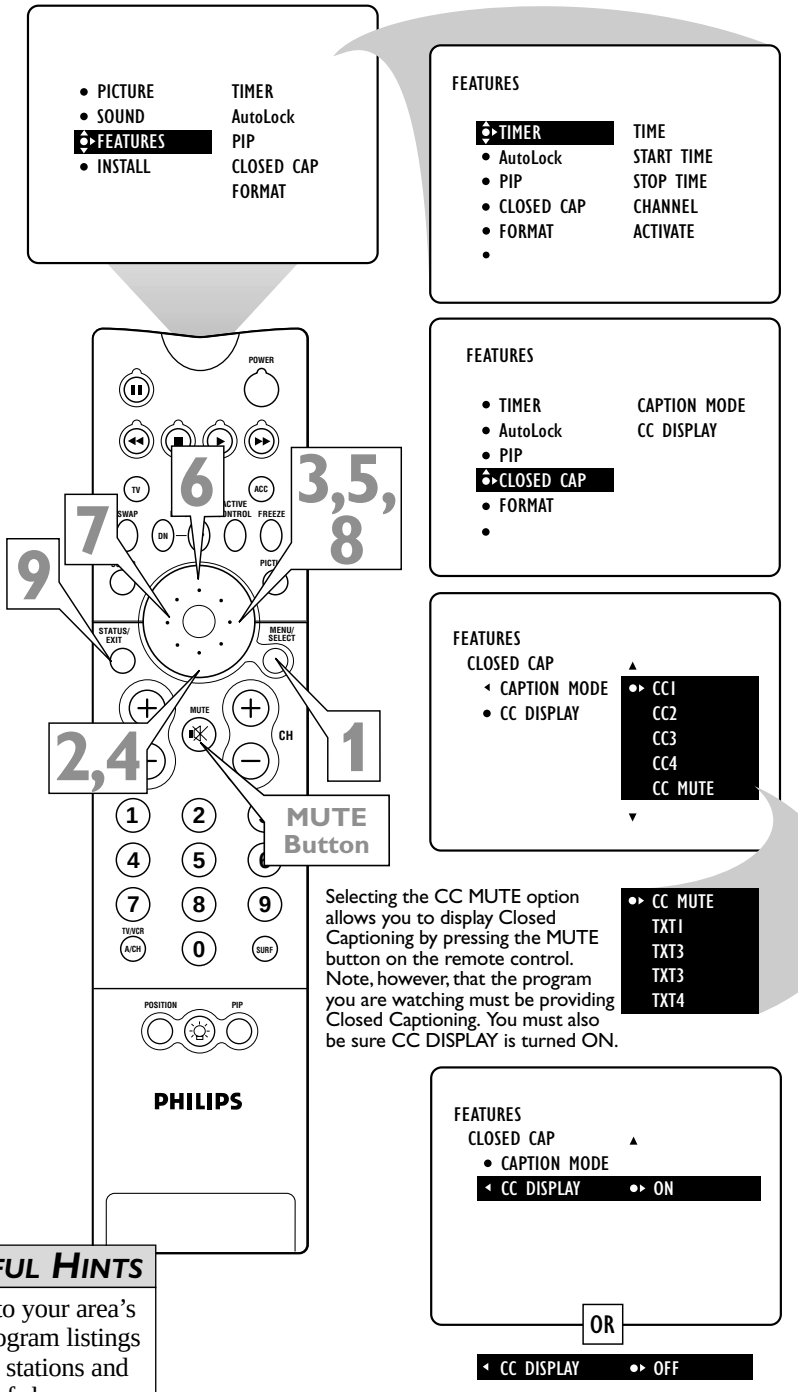
NOTES:

- CC1 mode is the usual setting. CC2, CC3, and CC4 may not be supported by broadcast stations.
- The CC MUTE option turns the Closed Captioning mode on whenever the MUTE button on the remote control is pushed. Select CC MUTE in the on-screen submenu to turn this feature on.

7 **Press the CURSOR RING LEFT** to return to the CLOSED CAP submenu. Then press the CURSOR RING DOWN to highlight CC DISPLAY.

8 **Press the CURSOR RING RIGHT** to turn the on-screen display of Closed Captioning on or off. Closed Captioning will be shown only if the TV station broadcasting on the channel has the feature available.

9 **Press the STATUS/EXIT button** to exit the menu.



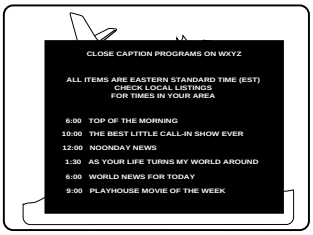
HELPFUL HINTS

- Refer to your area's TV program listings for the stations and times of shows being broadcast with Closed Captioning.
- Broadcasters determine the content of captions. Any occurrences of misspellings, incorrect grammar, or strange characters are not the result of TV malfunction.

CAPTION Mode
Example Display

TEXT Mode
Example Display

The TV program is blocked by the Text screen.


CLOSE CAPTION PROGRAMS ON WXYZ
ALL ITEMS ARE EASTERN STANDARD TIME (EST)
CHECK LOCAL LISTINGS
FOR TIMES IN YOUR AREA
6:00 TOP OF THE MORNING
10:00 THE BEST LITTLE CALL-IN SHOW EVER
12:00 NOONDAY NEWS
1:30 AS YOUR LIFE TURNS MY WORLD AROUND
6:00 WORLD NEWS FOR TODAY
9:00 PLAYHOUSE MOVIE OF THE WEEK

USING THE PICTURE-FORMAT CONTROL

Your TV's wide screen (16:9 aspect ratio) delivers a home-cinema experience not possible with a conventional (4:3 aspect ratio) set. High-definition (HD) programs originating in 16:9 format and other widescreen-format video sources appear more lifelike, dramatic, and theatrical. Border bars are diminished or eliminated. Most anamorphic-DVD programs will fill the wide screen without border bars.

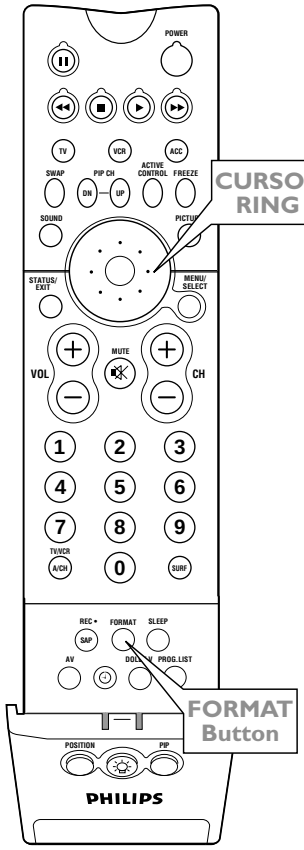
Use your HD set-top box or progressive-scan-capable DVD player to control the picture formats of video sources connected to the TV's HD inputs.

For flexibility with video sources connected to your TV's standard inputs—ANTENNA, AV1, CVI, AV2, or AV3 (side panel)—access your TV's picture-format modes. View a video source in standard (4:3) format or enlarge it to fill the screen in various ways using EXPAND 4:3, PANORAMA, WIDE SCREEN, or AUTO.

Pictures appear more lifelike, dramatic, and theatrical on your TV's wide screen.

Selecting a Picture Format Using the Remote Control

Use your TV's picture-format modes with video sources you connect to the ANTENNA, AV1, CVI, AV2, or AV3 (side panel) inputs on the TV. While watching a video source—with no on-screen menu or display present—press the CURSOR RING RIGHT or LEFT as many times as necessary to select the picture format you desire. Or press the FORMAT button to perform the same function.



Picture-format Modes

4:3 shows the conventional (4:3 aspect ratio) picture in its original format. Border bars are displayed on the sides. (See the warning below.)

EXPAND 4:3 expands, or zooms, the picture both vertically and horizontally, eliminating or reducing the size of border bars. Picture information is lost around the edges.

PANORAMA stretches the outer portions of the picture horizontally and causes some vertical expansion.

WIDE SCREEN expands the picture horizontally. No vertical expansion occurs.

AUTO senses the presence of border bars and zooms the picture to reduce or eliminate the bars. The amount of zoom varies based on the original picture, but this option can provide more expansion than EXPAND 4:3.

AUTO works best with video programs that were originally "letterboxed." Formatted to preserve the original theatrical aspect ratio, these programs are presented with border bars at top and bottom.

WARNING

To prevent uneven picture tube aging, do not leave border bars or other stationary images on screen for extended periods of time. See page 60.

HELPFUL HINTS

- The term *aspect ratio* refers to the relationship between the width and height of a TV screen. Historically, TV screen width has been 33 percent greater than its height, amounting to a 4:3 aspect ratio. The width of your widescreen TV, however, is nearly 80 percent greater than its height, which means its aspect ratio is 16:9. This screen corresponds well with the tendency of the eyes to feel more comfortable with fields of view and action planes that are horizontally oriented. The wide screen is also proportionally truer to the formats in which movies are filmed and presented in theaters.
- Although the term *widescreen* can have various meanings, it is most commonly used to refer to a picture format or screen that has a greater aspect ratio than the conventional 4:3.

The picture-format modes are available for use only with video sources connected to the ANTENNA, AV1, CVI, AV2, and AV3 (Side Panel) inputs on the TV. Control the picture formats of video sources connected to the HD inputs through the set-top box (for HD programming) or progressive-scan-capable DVD player (for DVD programs)

4:3
Shows the conventional picture in its original format. Border bars are displayed on the sides. See the Warning on this page (below, left).

EXPAND 4:3
Zooms the picture vertically and horizontally.

PANORAMA
Stretches the outer parts of the picture horizontally and causes some vertical expansion.

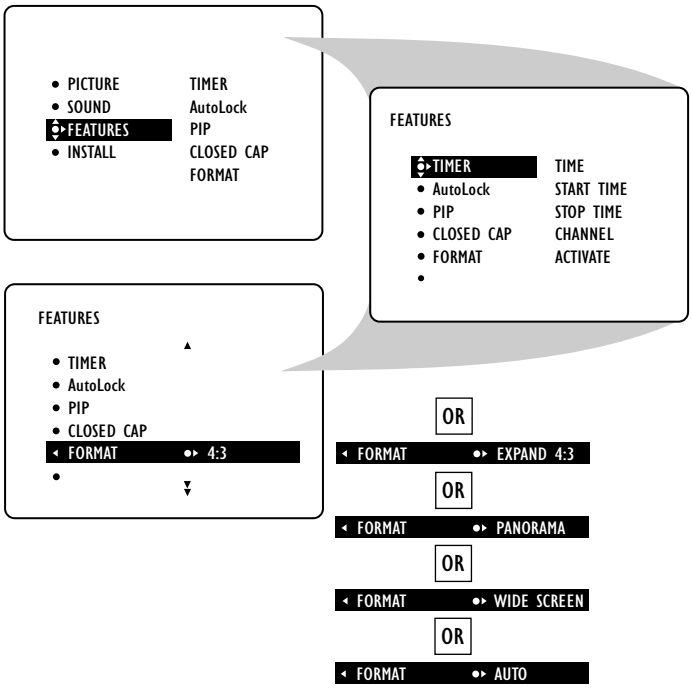
WIDE SCREEN
Expands the picture horizontally. No vertical expansion occurs.

AUTO
Senses the presence of picture borders and zooms the picture to reduce or eliminate the borders.

USING THE PICTURE-FORMAT CONTROL

Selecting a picture Format Using the TV Buttons

Should your remote control become lost or otherwise unavailable for use, follow the steps below to use the buttons on the front of the TV to access the on-screen menu and select a picture-format control.



1. **Press the Volume + and – buttons** at the same time. The on-screen menu appears.
2. **Press the Channel Down button** repeatedly until FEATURES is highlighted. Then press the Volume + button to enter the FEATURES submenu.
3. **Press the Channel Down button** repeatedly until FORMAT is highlighted. Then press the Volume + or – button until you select the picture format you want.
4. **Press the Volume + and – buttons** at the same time and repeatedly until you back out of the menu screens.

WARNING

To prevent uneven picture tube aging, do not leave nonmoving images or border bars on the screen for an extended period. See page 60.

HELPFUL HINT

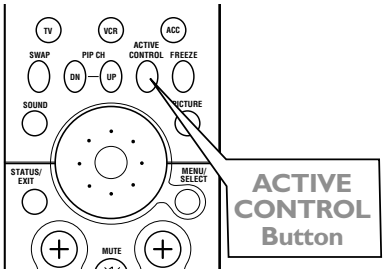
The TV's Picture-format options are available only with video sources connected to the ANTENNA, AV1, CVI, AV2, or AV3 (side panel) inputs on the TV. The picture formats of video sources connected to the HD inputs are controlled through the HD set-top box or progressive-scan-capable DVD player providing the video source.

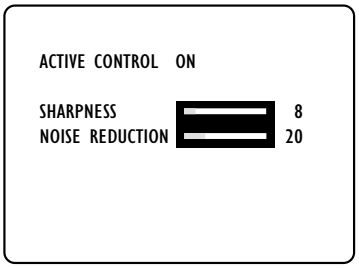
USING ACTIVE CONTROL™

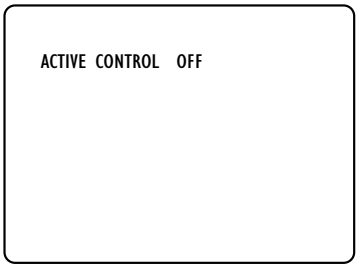
Active Control™ measures and corrects all incoming signals to provide the best picture-quality settings.

When you choose to turn Active Control™ on, picture sharpness and noise reduction are controlled automatically. Active Control™ adapts picture settings continuously and automatically.

***NOTE:** Active Control™ is not available for signals connected to HD INPUT-AV 4 or HD INPUT-AV5.*





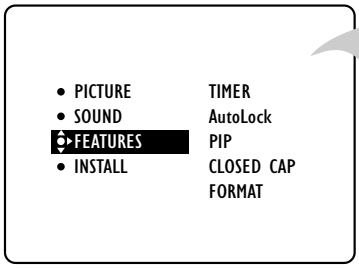


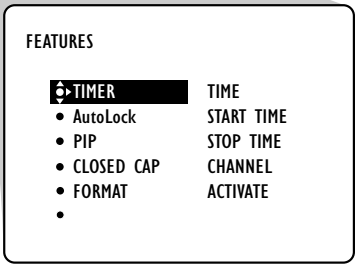
Turning Active Control™ on or off Using the Remote Control

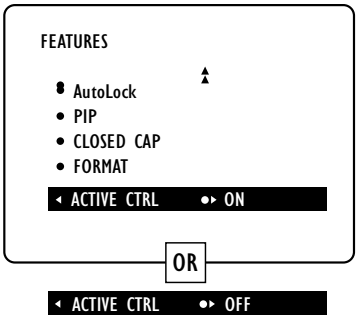
While watching TV, press the ACTIVE CONTROL button on the remote control to turn the feature on or off. When you turn Active Control™ on, the on-screen display shows the up-to-the-moment picture Sharpness and Noise Reduction settings.

Turning Active Control™ on or off Using the TV Buttons

Should your remote control become lost or otherwise unavailable for use, follow the steps below to use the buttons on the front of the TV to access the on-screen menu and turn Active Control™ on or off.







1 **Press the Volume + and – buttons** at the same time. The on-screen menu appears.

2 **Press the Channel Down button** repeatedly until FEATURES is highlighted. Then press the Volume + button to enter the FEATURES submenu.

3 **Press the Channel Down button** repeatedly until ACTIVE CTRL is highlighted. Then press the Volume + or – button to turn Active Control™ on or off.

4 **Press the Volume + and – buttons** at the same time and repeatedly until you back out of the menu screens.

COMPATIBILITY INFORMATION FOR THE TV'S HIGH-DEFINITION INPUTS

Your set's HD inputs (HD INPUT-AV 4 and HD INPUT-AV 5) are designed to accept high-definition signal standards 480p and 1080i as specified by the Electronic Industries Association. Output standards may vary by manufacturer. Refer to the directions-for-use manual for the digital equipment before connecting.

HELPFUL HINTS

- No industry standards have been established for HD television RGB signal systems, timing, synchronization, and signal strengths. The HD INPUT-AV 4 RGB inputs on your Philips TV will not be compatible with all digital equipment that offers RGB outputs. If the digital equipment you want to connect offers both component video and RGB, component video is the suggested type of connection to use.
- Your TV's on-screen INSTALL submenu provides the option of switching the AV4 signal source between YPbPr and RGB color-space settings. The option is available only when you have selected the AV4 signal source (using the AV button on the remote or the Source Select button on the TV). The default setting for AV4 is YPbPr. See page 59.

HD INPUT-AV 4

When the Inputs Are Used with Component Video Signals

Y INPUT: 1.0 Vp-p (includes sync), 75 ohms
Pr INPUT: 700m Vp-p, 75 ohms
Pb INPUT: 700m Vp-p, 75 ohms

NOTES:
The Pb INPUT jack can also receive signals from outputs labeled Cb or B-Y.
The Pr INPUT jack can also receive signals from outputs labeled Cr or R-Y.

When the Inputs Are Used with RGB Video Signals

G/Y: 1.0 Vp-p, 75 ohms (compatible with sync on green)
R/Pr: 700 mVp-p, 75 ohms
B/Pb: 700 mVp-p, 75 ohms
H: 3 Vp-p ± 1.0 V, 1 kohm (when using separate H and V sync)
V: 3 Vp-p ± 1.0 V, 1 kohm (when using separate H and V sync)

HD INPUT-AV 5

This input accepts a digital video interface (DVI) plug, which uses digital data in the format data standard called **T**ransition **M**inimized **D**ifferential **S**ignaling (TMDS).

Appendix B Model Specifications

Product Type

Rear-projection HDTV Monitor

Television System

NTSC standard

Channel Coverage

VHF: 2–13
UHF: 14–69
Cable TV: Midband
Superband
Hyperband
Ultraband

Ambient Operating Temperature

+41 to 113°F (+5 to +45°C)

Mains Voltage

AC 110 ±10%

Power Consumption

180W (average)

Standby Power

<1W

Audio

Frequency response: 20Hz–15kHz, +1/–3dB (ampl.)
Stereo output with 2 x 10W RMS (50Hz–10kHz at 5% THD, 8-ohm load)
Two, 4 x 6" speakers

Video/Audio Terminals

INPUT-AV 1
VIDEO (composite): 1 Vp-p, 75 ohms
AUDIO: 500 mVrms, 30 kohm

COMPONENT VIDEO INPUTS (YPbPr)
Y INPUT: 1.0Vp-p (includes sync), 75 ohms
Pb INPUT: 700mVp-p, 75 ohms
Pr INPUT: 700mVp-p, 75 ohms
(The Pb INPUT jack can also receive signals from outputs labeled Cb or B-Y. The Pr INPUT jack can also receive signals from outputs labeled Cr or R-Y.)

S-VIDEO INPUT (INPUT-AV 1, INPUT-AV2, side panel)
Y-INPUT: 1 Vp-p (includes sync), 75 ohms
C-INPUT: 300 mVp-p, 75 ohms

INPUT-AV 2
VIDEO (composite): 1 Vp-p, 75 ohms
AUDIO: 500 mVrms, 30 kohm

HD INPUT-AV 4
Component Video YPrPb/RGB (See page 57)
AUDIO: 500 mVrms, 30 kohm

HD INPUT-AV 5
Digital Video Interface (DVI) (See page 57)
AUDIO: 500 mVrms, 30 kohm

VIDEO/AUDIO OUTPUT
VIDEO: 1 Vpp, 75 ohms
AUDIO: Fixed: 500 mVrms into > 10 kohm
Variable: 0–2 Vrms into > 10 kohm

Side Panel (AV3)
VIDEO (composite): 1 Vp-p, 75 ohms
AUDIO: 500 mVrms, 30 kohm
HEADPHONE: 1.5 Vrms, 16 ohm

Picture Display Capability

1080i HD and 480p

Picture Visible Area

51"

Product Dimensions

49" W x 55.1" H x 24.3" D

Product Weight

184 lbs

Supplied Accessories

Remote control with two size "AA" batteries.

Design and specifications are subject to change without notice.

SETTING COLOR SPACE FOR THE HD INPUTS

Appendix C

Color space refers to how colors are defined and appear on your TV. Your TV's default color-space setting for HD INPUT-AV 4 is YPbPr. RGB is also an option. If the picture's color looks grossly incorrect, try changing the color-space setting on either the digital equipment or the TV. For more information on setting the color space on the digital equipment, see its directions-for-use manual. To set the TV's color space, follow the steps below.

1 **Press the AV button on the remote control** as many times as necessary to select AV4.

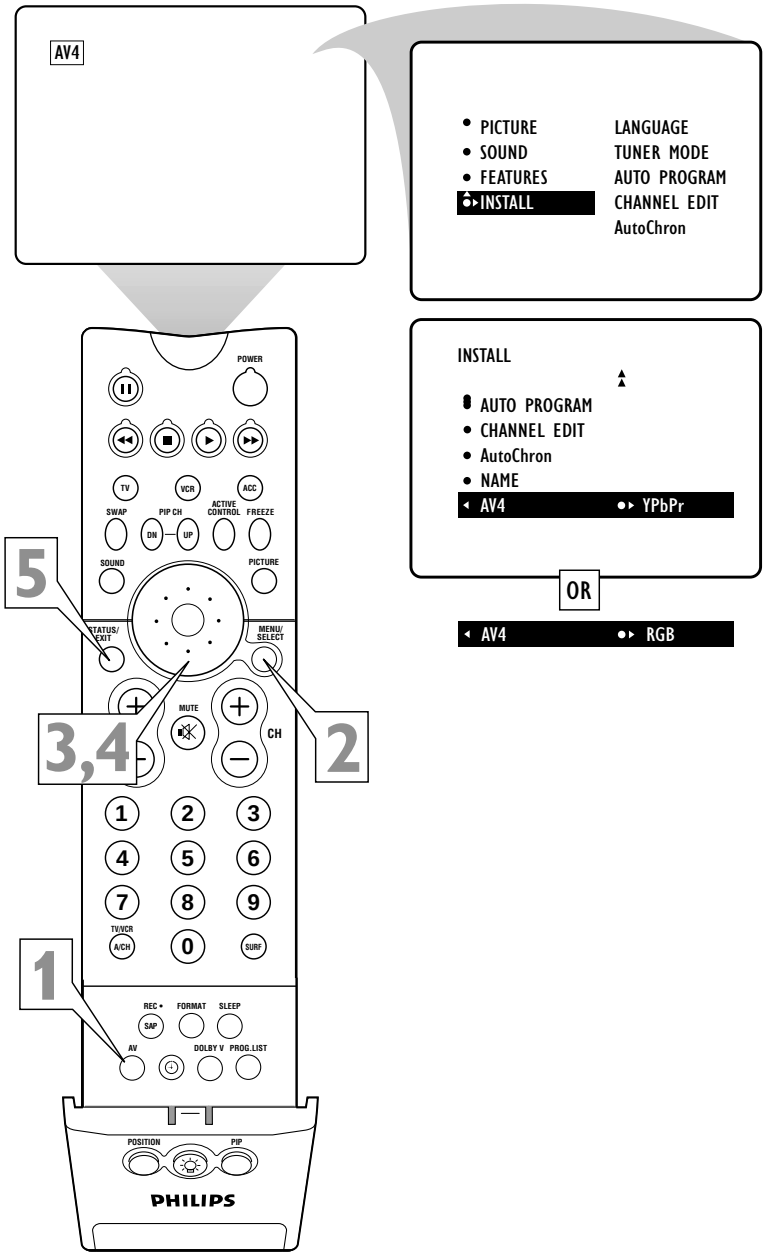
2 **Press the MENU/SELECT button.** The on-screen menu appears.

3 **Press the CURSOR RING DOWN** until INSTALL is highlighted. Then press the CURSOR RING LEFT or RIGHT to enter the INSTALL sub-menu.

4 **Press the CURSOR RING DOWN** repeatedly until AV4 is highlighted. The current color space is shown (either YPbPr or RGB).

If you want to change the setting, press the CURSOR RING LEFT or RIGHT.

5 **Press the STATUS/EXIT button** to exit the menu.



Care and Cleaning

WARNING Concerning Stationary Images on the TV Screen:

Do not leave picture border bars or stationary images on screen for extended periods of time. This can cause uneven picture tube aging.

Normal use of the TV should involve the showing of pictures that contain constantly moving and changing images that fill the screen. Be careful not to leave nonmoving images on screen for extended periods of time, or to display the same images on screen too frequently, because subtle ghost images can be left on the picture tubes. Avoid showing pictures with border bars or the same stationary images more than 15 percent of your total viewing in any one week. Sources of stationary images may be broadcast channels, cable channels, satellite channels, digital television boxes, DVD discs, laser discs, video games, CD-i discs, videotapes, and others. **Here are some examples of stationary images (this is not an all-inclusive list; you may encounter others in your viewing):**

- **Border bars—**solid bars shown when viewing a standard (4:3) picture and some widescreen movies on your widescreen (16:9) TV
- **DVD menus—**listings of DVD disc content
- **Video-game images and scoreboards**
- **Television station logos—**present a problem if they are bright and stationary; moving or low-contrast graphics are less likely to cause uneven aging of the picture tube
- **Stock-market tickers—**presented at the bottom of the TV screen
- **Shopping channel logos and pricing displays—**bright and shown constantly or repeatedly in the same location on the TV screen.

All picture tubes age with use, with their light output diminishing over time. But by maintaining normal use—mixing television picture types—you will create conditions in the tubes age at an even rate. The result will be a TV picture that is evenly bright over the entire screen.

Placement of the TV

- To avoid cabinet warping, cabinet color changes, and increased chance of set failure, do not place the TV where temperatures can become excessively hot; for example, in direct sunlight or near a heating appliance.
- Be sure to allow a free flow of air to and from the perforated back cover of the set.

Cleaning

- To avoid possible shock hazard, be sure the TV is unplugged from the electrical outlet before cleaning.
- Regularly dust the TV with a dry, nonscratching duster to keep the TV clean.
- When cleaning the TV, take care not to scratch or damage the screen surface. Avoid wearing jewelry or using anything abrasive. Do not use household cleaners. Wipe the front screen with a clean cloth dampened with water. Use even, easy, vertical strokes when cleaning.

  Specially designed screen-cleaning kits are also available. These kits contain anti-static cleaners and cloths designed to get into the ridges of the TV screen. Purchase the kits at stores that sell electronics. Or call our Customer Care Center at 1-800-531-0039.
- Gently wipe the cabinet surfaces with a clean cloth or sponge dampened in a solution of cool, clear water and a mild soap or detergent. Use a clean, dry cloth to dry the wiped surfaces.
- Occasionally vacuum the ventilation holes or slots in the back cover of the set.
- Never use thinners, insecticide sprays, or other chemicals on or near the cabinet, as they might cause permanent marring of the cabinet finish.

TROUBLESHOOTING

Check This List of Symptoms and Possible Solutions Before Requesting Service

You may be able to solve the problem yourself. Charges for TV installation and adjustment of customer controls are not covered under your warranty.

If you need to call a customer service representative, please know the model number and serial number of your product before you call. This information is displayed on the back of the product. Also, please take a moment to identify the problem you are having, and be prepared to explain this to the representative. If you believe the representative will need to help you with operations, please stay near the product. Our representative will be happy to assist you. **To reach our Customer Care Center, call 1-800-531-0039.**

Difficulties and Possible Solutions (*Q refers to the Quick Use and Setup Guide that came with your TV.)

The TV remote control does not work

- Check that the batteries are installed correctly. *See page Q-2*.*
- If the batteries are dead, replace them with two "AA" size heavy duty (zinc chloride) or alkaline batteries. *See page *Q-2.*
- Be no farther than 30 feet from the TV when using the remote control and point the remote toward the remote-sensor window on the TV. *See page *Q-2 for the location of the remote-sensor window.*
- Clean the remote control and the remote-sensor window on the TV. *See page *Q-2 for the location of the remote-sensor window.*
- Check the TV power cord. Unplug the TV, wait 10 seconds, then reinsert the plug into the outlet and push the remote power or TV power/standby button again. *To locate the TV power/standby button, see page *Q-2.*
- If you have your TV plugged into an AC power strip, ensure that the fuse on the power strip is not blown.
- Check to see if the TV is on a wall switch.

The TV has no power

- Check the TV's power cord. Unplug the TV, wait 10 seconds, then reinsert the plug into the outlet and push the remote-control power or TV power/standby button again. *The location of the TV power/standby button is illustrated on page *Q-2.*
- Check that the outlet is not on a wall switch.
- If you are using an AC power strip, be sure the fuse on the power strip is not blown.

You cannot get a picture

- Be sure that you have made signal connections correctly and securely. *See pages *Q-1, *Q-2, 6–10, and 12–16.*
- Check the Tuner Mode control for the correct tuner setting. *See page *Q-4.*
- Try running the Auto Program feature. *See page *Q-4.*
- Ensure that you have selected the correct picture signal source using the AV (remote) or Source Select (TV) buttons. *See page 24.*
- If you are attempting to view a picture from a progressive-scan-capable DVD player connected to the HD INPUT-AV 4 jacks, ensure that you have switched the DVD player to progressive-scan mode. *See page 12, as well as the DVD player's directions-for-use manual.*
- If you are using an HD receiver, ensure that its output is set correctly (HD or SD) based on the connection to the TV you have made. *See page 15. Also, refer to the directions-for-use manual that came with the HD receiver.*

Picture is fuzzy or out of focus

Check the set's convergence and adjust if necessary. *See page *Q-8.*

You cannot see a picture when you play a VCR tape

Press the AV button on the remote control or the Source Select button on the TV until you have selected the source to which you connected the VCR. *See page 24 (AV button) or page *Q-2 (Source Select button).*

You cannot tune to a particular channel

- Use the number buttons on the remote instead of the CH +/– buttons. *See page *Q-3 (remote-control buttons).*
- If necessary, select the Tuner Mode and run Auto Program to store channels to the set's memory. See page *Q-4.

You see scrolling images

Check to ensure that you have made connections correctly. *See pages *Q-1, *Q-2, 6–10, and 12–16.*

The list of difficulties and possible solutions continues on the next page.

TROUBLESHOOTING (CONTINUED)

Difficulties and Possible Solutions (*Q refers to the Quick Use and Setup Guide that came with your TV.)

The picture has no color or colors are not correct

- Check to ensure that you have made connections correctly. *See pages *Q-1, *Q-2, 6–10, and 12–16.*
- If you have connected digital equipment to the HD inputs, check/change the color-space setting on the equipment or TV. *See page 59.*
- If the picture has red or blue haloes, you may need to adjust the convergence. *See page *Q-8.*

You are not able to get sound

- Check the Volume buttons on the remote control or on the TV. *See pages *Q-2 (TV buttons) and *Q-3 (remote-control buttons).*
- Check the Mute button on the remote. *See page *Q-3 for the location of the Mute button.*
- Check the Audio Out and Speaker controls. *See page 10.*
- If you have connected auxiliary sound equipment, check to ensure that you have made the audio connections correctly. *See pages 6–16.* (*If you have connected an external audio hi-fi system, see page 10 to ensure that you have made the connections and set the AUDIO OUT control correctly.)*

TV displays wrong channel or no channels above 13

- Try selecting the channel again.
- Add the desired channel numbers into the TV using the Channel Edit control. *See page *Q-5.*
- Check to ensure that the Tuner Mode is properly set and run Auto Program. *See page *Q-4.*

Glossary of Television Terms

Active Control™ • Proactive video-control system for NTSC (see definition below) sources. Active Control™ continuously measures and corrects the incoming signals to provide the best picture possible.

Alternate Channel • The feature that allows you to toggle between the last two channels viewed by pressing the A/CH button on the remote control.

Audio/Video Inputs • Jacks (standard RCA), located on the rear of the TV, used for the input of audio and video signals. These jacks are designed for use with VCRs (or other accessories) to receive higher picture resolution and offer sound-connection options.

Auto Program • The feature that, when activated, scans for all available channels from regular antenna or cable signals and stores only active broadcast stations in the TV's memory.

Channel Edit • The feature that allows you to add or delete channels from the list of channels stored in the TV's memory. Channel Edit makes it easy to limit or expand the number of channels that are available to you when you press the CH +/– buttons on your remote control.

Closed Captioning • The broadcast standard feature that allows you to read the voice content of television programs on the TV screen. Designed to help the hearing impaired, Closed Captioning uses on-screen text boxes to show dialogue and conversations while a TV program is in progress.

Coaxial Cable • A single solid wire normally matched with a metal plug (F-type) end connector that screws (or pushes) directly onto a 75-ohm input found on the television or VCR.

Comb Filter • TV filter that removes distortion, resulting in a sharper and purer color display. The comb filter addresses the annoying cross-color distortion that may occur in TV broadcasts when, for example, the presenter wears a striped or checked jacket.

Component Video Inputs • Inputs that allow the separate reception of blue, red, and luminance signals. These inputs provide the highest possible color and picture resolution in the playback of digital signal-source material, such as the kind available from DVD players. Component video inputs allow for improved bandwidth information not possible through composite video or S-Video connections.

Composite Video Input • An input in which all the components required for displaying the on-screen image are combined in one signal.

Convergence • The technique used in color TV for bringing the red, green, and blue color beams together so that they hit the same part of the picture tube screen at the same time. This avoids color fringes around images in the picture.

High-definition Television (HDTV) • High-resolution digital television. HDTV has lifelike pictures, and with it films retain their original width, enhancing the home theater experience.

Incredible Surround™ • False acoustic management of the audio signal that produces a dramatic expansion of the wall of sound that surrounds the listener and heightens overall viewing pleasure.

Interlaced • A picture-scanning technique that improves the appearance of on-screen motion. It also helps smooth jagged lines that are sometimes seen on curved and angled surfaces in the picture.

Menu • An on-screen list of feature controls available for you to adjust or set.

NTSC • National Television Standards Committee format devised in the 1940s for TV broadcast analog video signals (525 lines: 30 Hz).

On-screen Displays (OSD) • The wording or messages generated by the television (or VCR) to help you with specific feature controls (color adjustment or programming, for example).

Picture-in-Picture • The showing of two pictures on the TV screen at the same time (one main screen picture and one small picture, or PIP).

Progressive Scan • A picture-scanning technique that doubles the number of picture lines, eliminating the flicker and providing a jitter-free picture.

PTV • Projection Television. (Rear- and/or front-projection design systems are available.)

Remote-control Sensor Window • The window or opening found on the television control panel through which infrared remote-control command signals are received.

RGB • Red, green, and blue signal. These are the primary colors of light that are used to produce a picture in television. Levels of R, G, and B are mixed to produce proper color and brightness in the picture.

RF • Radio Frequency or modulated signal design used as the carrier for television broadcasts.

Second Audio Program (SAP) • SAP is an additional part of the stereo broadcast system that can be heard apart from the current TV program sound. TV stations are free to use SAP for any number of purposes.

Status/Exit Button • Remote-control button that, when pressed, shows the current channel number, name (if set), time (if set), Sleep Timer setting, and sound setting (stereo, mono, SAP, or mute). Pressing the button twice shows the current AutoLock™ settings. Pressing the button once when an on-screen display is showing removes the on-screen display. You can use Status/Exit rather than having to wait for the displays to "time out," or automatically disappear from the screen.

S-Video Input • Signal input that allows direct connection of high-resolution video sources, such as a satellite receiver, DVD player, S (Super)-VHS videocassette recorder, or video games. Provides improved picture resolution, sharpness, and clarity.

480p • Digital picture format with 704 x 480 pixels, sent at 60 complete frames per second. This is the output format of progressive-scan DVD players.

1080i • Digital high-definition picture format with 1920 x 1080 pixels, sent at 60 interlaced frames per second (30 complete frames per second).

Tint • TV function that allows you to change the general color balance between cool and warm. Adjust tint according to your personal preference.

Twin–lead Wire • The more commonly used name for the two-strand, 300-ohm antenna wire used with many indoor and outdoor antenna systems. In many cases, this type of antenna wire requires an additional adapter (or balun) in order to connect to the 75-ohm input terminals designed into the more recent TVs and VCRs.

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*Q refers to the *Quick Use and Setup Guide* that came with your TV.

Factory Service Locations

★ **Indicates In-Home Service Only**
Milwaukee: call Chicago
Cincinnati and Columbus: call Cleveland
Nashville and Chattanooga: call Knoxville
Washington/Baltimore: call Philadelphia
Charlotte: call Atlanta
San Antonio: call Houston
All Florida locations: call Tampa

• **Indicates In-Home/Carry-In Service**

Toll-free numbers provided on the next page

NOTE: If you reside in one of our Philips Factory Service Branch areas (see directory on back), you can contact the nearest Service Branch to obtain efficient and expedient repair for your product. If your product is In-Warranty, you should have proof-of-purchase to ensure No Charge Service. For Out-of-Warranty service, call the location nearest you.

NOTA: Si vous résidez dans une des régions desservies par une succursale de service après vente du fabricant Philips (voir liste ci-dessous), vous pourrez contacter la branche de service après vente la plus près de chez vous pour obtenir un service après vente rapide et efficace. Si le produit est sous garantie, il suffira de présenter une preuve d`achat pour bénéficier d'un service sans frais. Pour les produits non couverts par la garantie, contactez le centre le plus près de chez vous.

NOTA: Si Ud. reside en una de nuestras zonas para sucursales Philips de servicio al de fábrica (ver directorio más abajo), Ud. puede comunicarse con la sucursal de servicio más cercana para obtener una reparación oportuna y eficaz de su producto. Si su producto está todavía bajo garantía, Ud. debe presentar comprobante de compra para no ocasionar ningunos cargos por servicio. Para servicio después del vencimiento de la garantía, llame al lugar más cercano de los abajo indicados.

In Canada

How you can obtain efficient and expedient carry-in, mail-in, or in-home service for your product
Please contact Philips at 1-800-661-6162 (French speaking)
1-800-531-0039 (English or Spanish speaking)

Au Canada

Comment obtenir le service après-vente pour les produits apportés ou envoyés par la poste à notre centre de service ou le service à domicile
Veuillez contacter philips á: 1-800-661-6162 (Francophone)
1-800-531-0039 (Anglais ou Espagnol)

En el Canadá

Cómo recibir servicio efficiente para su producto, en persona, por correo o a domicillo
Favor de comunicarse con Philips al: 1-800-661-6162 (francófono)
1-800-531-0039 (Inglés o Español))

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Factory Service Locations

Quality service is as close as your telephone! Simply look over the list below for the number of a Factory Service Center near you. Your product will receive efficient and expedient carry-in, mail-in, or in-home service, and you will receive peace of mind, knowing your product is being given the expert attention of Philips' Factory Service.

COMMENT OBTENIR NOTRE SERVICE APRÈS VENTE RAPIDE ET EFFICACE SOIT PAR COURRIER, À DOMICILE, OU EN SE PRÉSENTANT À UN CENTRE DE SERVICE PHILIPS. PLUS DE 600 CENTRES DE RÉCEPTION DE PRODUITS À RÉPARER À TRAVERS LE PAYS: CONTACTER LE CENTRE DE SERVICE AUX CONSOMMATEURS LE PLUS PROCHE POUR SAVOIR L'EMPLACEMENT DE CES DÉPÔTS DANS UN RAYON DE 50 À 75 MILES (80 KM À 120 KM) DU CENTRE DE SERVICE LOCAL.

CÓMO OBTENER UN SERVICIO OPORTUNO Y EFICIENTE POR CORREO, EN CASA O EN PERSONA PARA SU PRODUCTO A TRAVÉS DE UN CENTRO PHILIPS DE SERVICIO. MAS DE 600 SITIOS POR TODO EL PAIS PARA LA RECEPCION DE PRODUCTOS NECESITADOS DE REPARACIONES: COMUNICARSE CON EL CENTRO DE SERVICIO DE FABRICA MAS CERCANO PARA ESTOS LUGARES DENTRO DE UN RADIO DE 80 A 120 KM (50 A 75 MILLAS) DEL CENTRO DE SERVICIO LOCAL.

ATLANTA
Philips Factory Service
550 Franklin Road., Suite F
Marietta, GA 30067
800-273-1501

TAMPA
Philips Factory Service
1911 US Highway 301 North, Suite 100
Tampa, FL 33619
800-442-2027

SAN FRANCISCO
Philips Factory Service
681 East Brokaw Rd.
San Jose, CA 95112
800-300-9013

HOUSTON
Philips Factory Service
1110 N. Post Oak Rd., Suite 100
Houston, TX 77055
800-952-3254

CLEVELAND
Philips Factory Service
950 Keynote Circle
Brooklyn Heights, OH 44131
800-331-7037

DETROIT
Philips Factory Service
25173 Dequindre
Madison Heights, MI 48071
800-438-1398

DALLAS
Philips Factory Service
415 N. Main Street, #107
Euless, TX 76040
800-952-3254

LOS ANGELES
Philips Factory Service
20930 Bonita, Ste. V
Carson, CA 90746
800-300-9013

CHICAGO
Philips Factory Service
1279 W. Hamilton Pkwy.
Itasca, IL 60143
800-531-2922

KNOXVILLE
Philips Factory Service
One Philips Drive
Building 2
Knoxville, TN 37914
800-821-1767

PHILADELPHIA
Philips Factory Service
354 Dunks Ferry Rd.
Bensalem, PA 19020
800-847-9320

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LIMITED WARRANTY

PROJECTION TELEVISION

One Year Free Labor

One Year Free Service on Parts

Two Years Free Service on Cathode Ray Tube Parts / 30 days Free Service on Projection TV Screen

This product can be repaired in-home.

WHO IS COVERED?

You must have proof of purchase to receive warranty service. A sales receipt or other document showing that you purchased the product is considered proof of purchase.

WHAT IS COVERED?

Warranty coverage begins the day you buy your product. For one year thereafter (30 days for the projection TV screen), all parts will be repaired or replaced, and labor and transportation are free. From one to two years from the day of purchase, you pay for the replacement or repair of all parts except the cathode ray tube and for all labor and transportation charges. After two years from the day of purchase, you pay for the replacement or repair of all parts and for all labor and transportation charges.

All parts, including repaired and replaced parts, are covered only for the original warranty period. When the warranty on the product expires, the warranty on all replaced and repaired parts also expires.

WHAT IS EXCLUDED?

Your warranty does not cover:

- labor charges for installation or setup of the product, adjustment of customer controls on the product, and installation or repair of antenna systems outside of the product.
- product repair and/or part replacement because of misuse, accident, unauthorized repair or other cause not within the control of Philips Consumer Electronics Company.
- reception problems caused by signal conditions or cable or antenna systems outside the unit.
- a product that requires modification or adaptation to enable it to operate in any country other than the country for which it was designed, manufactured, approved and/or authorized, or repair of products damaged by these modifications.
- incidental or consequential damages resulting from the product. (Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you. This includes, but is not limited to, prerecorded material, whether copyrighted or not copyrighted.)
- a product used for commercial or institutional purposes.

WHERE IS SERVICE AVAILABLE?

Warranty service is available in all countries where the product is officially distributed by Philips Consumer Electronics Company. In countries where Philips Consumer Electronics Company does not distribute the product, the local Philips service organization will attempt to provide service (although there may be a delay if the appropriate spare parts and technical manual(s) are not readily available).

MAKE SURE YOU KEEP...

Please keep your sales receipt or other document showing proof of purchase. Attach it to this owner's manual and keep both nearby. Also keep the original box and packing material in case you need to return your product.

BEFORE REQUESTING SERVICE...

Please check your owner's manual before requesting service. Adjustments of the controls discussed there may save you a service call.

TO GET WARRANTY SERVICE...

Repair must be performed by an authorized service center or a factory service center. *If you do not live near a factory service center,* contact your dealer. If your dealer is an authorized service center, he will arrange repair. If your dealer is not an authorized service center, he will direct you to the authorized service center engaged by him to service the products he sells.

(In U.S.A., Puerto Rico and U.S. Virgin Islands, all implied warranties, including implied warranties of merchantability and fitness for a particular purpose, are limited in duration to the duration of this express warranty. But, because some states do not allow limitations on how long an implied warranty may last, this limitation may not apply to you.)

(In Canada, this warranty is given in lieu of all other warranties. No other warranties are expressed or implied, including any implied warranties of merchantability or fitness for a particular purpose. Philips is not liable under any circumstances for any direct, indirect, special, incidental or consequential damages, howsoever incurred, even if notified of the possibility of such damages.)

IF YOU HAVE QUESTIONS...

Please contact Philips at:

1-800-531-0039, if calling from the USA (English or Spanish Speaking)
1-800-661-6162, if calling from Canada (French Speaking)
1-800-531-0039, if calling from Canada (English or Spanish Speaking).

REMEMBER...

Please record below the model and serial numbers found on the product. Also, please fill out and mail your warranty registration card promptly. It will be easier for us to notify you if necessary.

MODEL # _____

SERIAL # _____

This warranty gives you specific legal rights. You may have other rights which vary from state/province to state/province.

Philips Consumer Electronics, P.O. Box 520890, Miami, FL 33152, (402) 536-4171

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